Note: * Keywords preceded by an asterisk (*) should not be used.
        Instead, use one of the choices indicated.

Ablation
Absolute stability
Absorbing media
Abstracts
AC circuit breakers
AC generator excitation
AC generators
AC machines
*AC measurements+ ===> Instead use:
    Electric variables measurement
AC motor drives
AC motor protection
AC motors
*Accelerated testing+ ===> Instead use:
    Life estimation
Acceleration
Acceleration control
Acceleration measurement
*Accelerator beams+ ===> Instead use
     Particle beams
Accelerator cavities
Accelerator control systems
*Accelerator magnet power supplies+ ===> Instead use
     Accelerator power supplies
Accelerator magnets
Accelerator measurement systems
Accelerator power supplies
Accelerator RF systems
Accelerator safety
Accelerators
Access control
Access protocols
Accidents
Acoustic applications
Acoustic arrays
Acoustic beam focusing
Acoustic beam steering
Acoustic beams
Acoustic bonding
*Acoustic communication (underwater)+ ===> Instead use
     Underwater acoustic communication
Acoustic convolvers
Acoustic correlators
Acoustic couplers
Acoustic delay lines
Acoustic detectors
Acoustic device fabrication
    SN   Use for both commercial and noncommercial processes
Acoustic device thermal factors

Acoustic devices
Acoustic diffraction
Acoustic distance measurement
Acoustic emission
Acoustic fields
Acoustic filters
Acoustic frequency conversion
*Acoustic generators+ ===> Instead use
     Acoustic radiators
Acoustic holography
Acoustic imaging
Acoustic impedance
Acoustic interferometry
Acoustic materials
Acoustic materials-processing applications
Acoustic measurements
Acoustic microscopy
Acoustic motors
Acoustic noise
Acoustic noise measurement
Acoustic oscillators
Acoustic parametric amplifiers
Acoustic parametric devices
Acoustic position measurement
Acoustic propagation
*Acoustic propagation in nonlinear media+ ===> Instead use
     Nonlinear acoustics
Acoustic pulse compression
Acoustic pulses
Acoustic radiation effects
Acoustic radiators
Acoustic reflection
Acoustic refraction
Acoustic resonator filters
Acoustic resonators
Acoustic scattering
Acoustic signal analysis
Acoustic signal detection
Acoustic signal processing
*Acoustic sources+ ===> Instead use
     Acoustic radiators
Acoustic spectroscopy
*Acoustic surface waves+ ===> Instead use
     Surface acoustic waves
*Acoustic telemetry (underwater)+ ===> Instead use
     Underwater acoustic telemetry
Acoustic testing
Acoustic tomography
Acoustic tracking
*Acoustic transducer arrays+ ===> Instead use
     Acoustic arrays
Acoustic transducers
Acoustic velocity
Acoustic velocity measurement
   SN   Use for velocity measurement by acoustic means. For acoustic
wave velocity, use "Acoustic propagation"
Acoustic waveguides

Acoustics
Acoustoelectric correlators
Acoustoelectric delay lines
Acoustoelectric devices
Acoustoelectric effects
Acoustoelectric transducers
*Acoustomagnetic effects+ ===> Instead use
     Magnetoacoustic effects
Acoustooptic convolution
Acoustooptic correlators
Acoustooptic couplers
Acoustooptic deflectors
Acoustooptic devices
Acoustooptic diffraction
Acoustooptic effects
Acoustooptic filters
Acoustooptic measurements
Acoustooptic modulation
*Acoustooptic scanning+ ===> Instead use
     Acoustooptic deflectors
Acoustooptic signal processing
Acoustooptic switches
Acoustooptic transducers
Activation analysis
Active antennas
Active arrays
Active circuits
Active filters
Active vision
*Actively loaded antennas+ ===> Instead use
     Active antennas
Actuators
Acupuncture
AC-AC power conversion
AC-DC power conversion
Ada
Adaptive arrays
Adaptive coding
Adaptive control
Adaptive decoding
Adaptive equalizers
Adaptive estimation
Adaptive filters
Adaptive Kalman filtering
Adaptive modulation
Adaptive observers
Adaptive optics
Adaptive radar
Adaptive resonance theory
Adaptive signal detection
Adaptive signal processing
Adaptive systems
Adders
Addition
*Adhesives+ ===> Instead use
     Bonding
*Adjacent channel interference+ ===> Instead use

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        Interchannel interference
Admittance
Admittance matrix
Admittance measurement
*Advanced TV+ ===> Instead use
      HDTV
Aerodynamics
Aerosols
Aerospace biophysics
Aerospace control
*Aerospace ground equipment+ ===> Instead use
      Ground support
*Aerospace ground services+ ===> Instead use
      Ground support
Aerospace industry
Aerospace simulation
Aerospace test facilities
          "Space vehicle testing" was used
Aerospace testing
          "Space vehicle testing" was used
*AFC+ ===> Instead use
      Frequency control
Aging
*Aging of persons+ ===> Instead use
      Geriatrics
Agriculture
*Aids for the handicapped+ ===> Instead use
      Handicapped aids
*Air blast circuit breakers+ ===> Instead use
      Gas blast circuit breakers
Air break switches
*Air bubbles+ ===> Instead use
      Bubbles
*Air circuit breakers+ ===> Instead use
      Gas circuit breakers
Air conditioning
Air gaps
Air insulation
Air pollution
Air traffic control
Air transportation
Airborne radar
Aircraft
Aircraft antennas
Aircraft communication
Aircraft computers
Aircraft control
Aircraft control human factors
Aircraft crew training
Aircraft detection and tracking
Aircraft display human factors
Aircraft displays
*Aircraft electrical systems+ ===> Instead use
      Aircraft power systems
Aircraft electronics
*Aircraft engines+ ===> Instead use
      Aircraft propulsion
```

Aircraft expert systems
Aircraft instrumentation
Aircraft landing guidance
Aircraft lightning effects
Aircraft maintenance
Aircraft navigation
Aircraft power systems
Aircraft propulsion
Aircraft reliability
Aircraft testing
*Aircraft tracking+ ===> Instead use
     Aircraft detection and tracking
Alarm systems
Algebra
*Algebraic manipulation+ ===> Instead use
     Symbol manipulation
Algebraic Riccati equations
Algebraic-geometric codes
Algorithms
All pass circuits
*Allocation+ ===> Instead use
     Resource management
Alloys
*Alnico+ ===> Instead use
     Permanent magnets
*Aloha+ ===> Instead use
     Access protocols
Alpha particles
Alpha-particle detectors
Alpha-particle radiation effects
Alpha-particle spectroscopy
Alpha-particle spectroscopy detectors
Alternators
Altimetry
Aluminum
Aluminum alloys
Aluminum compounds
Aluminum conductors
*Aluminum industry+ ===> Instead use
     Metals industry
Aluminum integrated circuit conductors
Aluminum power conductors
*AM+ ===> Instead use
     Amplitude modulation
AM noise
Ammeters
Amorphous magnetic films
*Amorphous magnetic layered films
          was used
Amorphous magnetic materials
Amorphous magnetic wires
Amorphous materials
*Amorphous semiconductors
          was used
Amplifier distortion
Amplifier noise
Amplifiers

*Amplitude and phase shift keying+ ===> Instead use
     Quadrature amplitude modulation
Amplitude estimation
Amplitude modulation
Amplitude shift keying
AM-PM conversion
Analog circuits
Analog computers
Analog integrated circuits
Analog memories
Analog multipliers
Analog processing circuits
Analog system fault diagnosis
Analog system fault tolerance
Analog system testing
Analog systems
*Analogical reasoning+ ===> Instead use
     Case based reasoning
Analog-digital conversion
Anechoic chambers (acoustic)
Anechoic chambers (electromagnetic)
Anemometers
Anesthesiology
Angiocardiography
Angle modulation
Angular velocity
Animals
Animation
Anisotropic media
Annealing
Anodes
ANSI standards
*Antarctic region+ ===> Instead use
     Arctic regions
Antenna accessories
Antenna array feeds
Antenna array mutual coupling
Antenna arrays
*Antenna components+ ===> Instead use
     Antenna accessories
Antenna feeds
Antenna measurements
Antenna mechanical factors
Antenna proximity factors
Antenna radiation patterns
*Antenna terrain factors+ ===> Instead use
     Antenna proximity factors
Antenna theory
Antenna tolerance analysis
Antenna transient analysis
Antennas
Antialiasing
*Antiferroelectric materials+ ===> Instead use
     Dielectric materials
Antiferromagnetic materials
Aperture antennas
Apertures

*Appliances+ ===> Instead use
     Home appliances
Application specific integrated circuits
Approximation methods
Aquaculture
*Ar processes+ ===> Instead use
     Autoregressive processes
Arbiters
Arc discharges
Arc heating
*Arc lamps+ ===> Instead use
     Lighting
*Arc welding+ ===> Instead use
     Welding
Architectural acoustics
Architecture
*Architecture (computer)+ ===> Instead use
     Computer architecture
Arctic regions
Area measurement
Argon
*ARIMA processes+ ===> Instead use
     Autoregressive integrated moving average processes
Arithmetic
Arithmetic codes
*ARMA processes+ ===> Instead use
     Autoregressive moving average processes
Arms control
*Arms (robotic)+ ===> Instead use
     Manipulators
*ARQ+ ===> Instead use
     Automatic repeat request
*Array processing+ ===> Instead use
     Parallel processing
Array signal processing
Arrays
Arresters
Art
ART neural networks
Artificial biological organs
Artificial intelligence
Artificial limbs
*ASK+ ===> Instead use
     Amplitude shift keying
*Askarel insulation+ ===> Instead use
     Polychlorinated biphenyls
*Assemblers (program)+ ===> Instead use
     Program assemblers
Assembly
   SN   Use when the focus is on the process rather than the overall
system or setup
*Assembly methods+ ===> Instead use
     Assembly
*Assembly planning+ ===> Instead use
     Assembly
Assembly systems
Associative memories

Associative processing
Astronomical satellites
Astronomy
Asymptotic stability
Asynchronous logic circuit fault diagnosis
Asynchronous logic circuit fault tolerance
Asynchronous logic circuit testing
Asynchronous logic circuits
Asynchronous rotating machines
Asynchronous transfer mode
*ATE+ ===> Instead use
     Automatic test equipment
*ATM+ ===> Instead use
     Asynchronous transfer mode
*Atmosphere+ ===> Instead use
     Planetary atmospheres
Atmospheric measurements
Atomic beams
Atomic clocks
Atomic force microscopy
*Atomic frequency standards+ ===> Instead use
     Atomic clocks
*Atomic lasers+ ===> Instead use
     Gas lasers
Atomic measurements
Atomic physics
Attenuation
Attenuation measurement
Attenuators
Attitude control
*Attitude determination+ ===> Instead use
     Position measurement
*ATV+ ===> Instead use
     HDTV
*Audible noise+ ===> Instead use
     Acoustic noise
Audio amplifiers
Audio coding
Audio oscillators
Audio recording
Audio systems
*Audio-visual instructional aids+ ===> Instead use
     Educational technology
*Auditory evoked potentials+ ===> Instead use
     Bioelectric potentials
Auditory system
Aurora
Authoring languages
Authoring systems
*Autocorrelation+ ===> Instead use
     Correlation
Automata
Automated highways
*Automatic frequency control+ ===> Instead use
     Frequency control
*Automatic gain control+ ===> Instead use
     Gain control

Automatic optical inspection
Automatic programming
Automatic repeat request
Automatic test equipment
Automatic test languages
Automatic test software
Automatic testing
*Automatic vehicle monitoring+ ===> Instead use
     Road vehicle location monitoring
Automation
*Automobiles+ ===> Instead use
     Road vehicles
*Autonomous vehicles+ ===> Instead use
     Mobile robots
Autoregressive integrated moving average processes
Autoregressive moving average processes
Autoregressive processes
Autotransformers
Availability
Avalanche breakdown
Avalanche diodes
Avalanche photodiodes
*Avionics+ ===> Instead use
     Aircraft electronics
Awards
Backfire antennas
Backpropagation
*Backscattering+ ===> Instead use
     Scattering
Backward wave oscillators
Backward wave tubes
*Bacteria+ ===> Instead use
     Microorganisms
Balloons
Baluns
Banach spaces
Bandlimited circuits
Bandlimited communication
Bandlimited signals
Bandlimited stochastic processes
Bandpass filters
*Bandpass limiting+ ===> Instead use
     Limiting
Bandstop filters
Bandwidth compression
Bang-bang control
*Banking+ ===> Instead use
     Financial data processing
Bar codes
BARITT diodes
Barium
Barium alloys
Barium compounds
Barkhausen effect
Batteries
Battery chargers
Battery storage plants

Bayes procedures
*BCD+ ===> Instead use
     Binary coded decimals
BCH codes
*Beam focusing+ ===> Instead use
     Focusing
*Beam shaping+ ===> Instead use
     Shaped beam antennas
Beam splitting
Beam steering
Beam waveguides
*Beamforming+ ===> Instead use
     Array signal processing
Beams
Beam-lead devices
*Beam-trapping+ ===> Instead use
     Self-focusing
*Bearing estimation+ ===> Instead use
     Direction of arrival estimation
Bearings (mechanical)
Behavioral science
Belief maintenance
*Belief revision+ ===> Instead use
     Belief maintenance
Beryllium
Beryllium alloys
Beryllium compounds
*Bessel differential equation+ ===> Instead use
     Bessel functions
Bessel filters
Bessel functions
*Bessel transforms+ ===> Instead use
     Hankel transforms
Beta rays
Betatrons
Beta-ray detectors
Beta-ray effects
Beta-ray spectroscopy
Beta-ray spectroscopy detectors
Bibliographies
BiCMOS analog integrated circuits
BiCMOS digital integrated circuits
BiCMOS integrated circuits
BiCMOS memory integrated circuits
Biconical antennas
Bifurcation
Bilinear systems
Bilinear transformations
BIMOS integrated circuits
*Binary arithmetic+ ===> Instead use
     Digital arithmetic
Binary coded decimals
Binary sequences
*Binary signals+ ===> Instead use
     Signals
Binomial distributions
*Bioacoustics+ ===> Instead use

Biomedical acoustics
Biochemistry
*Biocontrol+ ===> Instead use
        Biological control systems
*Biocybernetics+ ===> Instead use
        Cybernetics
Bioelectric phenomena
Bioelectric potentials
*Biofeedback+ ===> Instead use
        Biological control systems
Biographies
Biological cells
Biological control systems
Biological effects of acoustic radiation
Biological effects of electromagnetic radiation
*Biological effects of gamma rays+ ===> Instead use
        Biological effects of nuclear radiation
Biological effects of nuclear radiation
Biological effects of optical radiation
Biological effects of radiation
Biological effects of X-rays
Biological gases
Biological liquids
Biological materials
*Biological membranes+ ===> Instead use
        Biomembranes
Biological motor systems
Biological organs
*Biological radiation effects+ ===> Instead use
        Biological effects of radiation
Biological system modeling
Biological systems
Biological thermal factors
Biological tissues
Biology
Bioluminescence
Biomagnetics
Biomechanics
Biomedical acoustic imaging
Biomedical acoustics
Biomedical applications of acoustic radiation
Biomedical applications of electromagnetic radiation
*Biomedical applications of gamma rays+ ===> Instead use
        Biomedical applications of nuclear radiation
Biomedical applications of nuclear radiation
Biomedical applications of optical radiation
Biomedical applications of radiation
Biomedical applications of X-rays
Biomedical communication
Biomedical computing
Biomedical electrodes
Biomedical electromagnetic imaging
Biomedical engineering
Biomedical engineering education
Biomedical equipment
Biomedical equipment safety
*Biomedical gamma-ray imaging+ ===> Instead use

Biomedical nuclear imaging
Biomedical image processing
Biomedical imaging
Biomedical impedance imaging
Biomedical infrared imaging
*Biomedical instruments+ ===> Instead use
    Biomedical measurements
Biomedical laboratories
Biomedical magnetic resonance imaging
Biomedical materials
Biomedical measurements
Biomedical microscopy
Biomedical monitoring
Biomedical nuclear imaging
Biomedical optical imaging
Biomedical power supplies
Biomedical recording
Biomedical signal analysis
Biomedical signal detection
Biomedical signal processing
Biomedical telemetry
Biomedical transducers
*Biomedical ultrasonics+ ===> Instead use
    Biomedical acoustics
Biomedical X-ray imaging
Biomembranes
*Biomolecular electronics+ ===> Instead use
    Molecular electronics
Biophysics
*Biosensors+ ===> Instead use
    Biomedical transducers
*Biotelemetry+ ===> Instead use
    Biomedical telemetry
*Biped locomotion+ ===> Instead use
    Legged locomotion
Bipolar analog integrated circuits
Bipolar digital integrated circuits
Bipolar integrated circuits
Bipolar memory integrated circuits
Bipolar transistor amplifiers
Bipolar transistor circuits
Bipolar transistor logic devices
Bipolar transistor oscillators
Bipolar transistor switches
Bipolar transistors
*Bipolar-CMOS integrated circuits+ ===> Instead use
    BiCMOS integrated circuits
Biquadratic filters
Biquadratic functions
*Birds+ ===> Instead use
    Animals
Birefringence
Bismuth
Bismuth alloys
Bismuth compounds
*BIST+ ===> Instead use
    Self-testing

*Bistability (optical)+ ===> Instead use
     Optical bistability
Bistable circuits
*Bistatic scattering+ ===> Instead use
     Multistatic scattering
Bit mapped graphics
*Bit synchronization+ ===> Instead use
     Synchronization
Blackboard architecture
*Bladder+ ===> Instead use
     Urinary system
Bloch lines
Block codes
Blood
Blood flow
Blood flow measurement
Blood oxygenators
Blood pressure
Blood pressure measurement
Blood pumps
Blood vessels
Bode diagrams
Boilers
Bolometer mounts
Bolometers
Boltzmann equation
Boltzmann machines
Bonding
Bones
Book reviews
Boolean algebra
Boolean functions
Booster accelerators
Booster injectors
Boron
Boron alloys
Boron compounds
Boundary element methods
Boundary integral equations
Boundary scan testing
Boundary value problems
Bragg scattering
Brain
Brain modeling
Braking
*Breadth first search+ ===> Instead use
     Tree searching
*Breakdown+ ===> Instead use
     Electric breakdown
Bremsstrahlung
Bridge circuits
Brillouin scattering
Broadband amplifiers
Broadband communication
*Broadband ISDN+ ===> Instead use
     B-ISDN
Broadcast channels

Broadcasting
Bromine
Bromine compounds
Brushes
Brushless machines
Brushless rotating machines
Bubble chambers
*Bubble domains+ ===> Instead use
     Magnetic bubble domains
Bubbles
*Bucket brigade devices+ ===> Instead use
     Charge transfer devices
*Buckminsterfullerene+ ===> Instead use
     Fullerenes
Buffer circuits
Buffer memories
Buffers
*Building acoustics+ ===> Instead use
     Architectural acoustics
*Building automation+ ===> Instead use
     Building management systems
Building management systems
Buildings
Built-in testing
Bulk acoustic wave devices
*Bulk memories+ ===> Instead use
     Mass memories
*Bulk power systems+ ===> Instead use
     Interconnected power systems
*Bunched particle beams+ ===> Instead use
     Particle beam bunching
Bundle conductors
Buried antennas
Buried object detection
Burn-in programs
Burst correction codes
Burst noise
Burst switching
Bus admittance matrix
Bus impedance matrix
Bus transfer
Busbars
*Bushings+ ===> Instead use
     Insulators
Business
Business communication
Business data processing
Business economics
Business planning
*Business writing+ ===> Instead use
     Writing
Butterworth filters
*B-ISDN
     networks" was used
C language
Cable insulation
Cable shielding

```
Cable TV
Cable TV interference
Cable TV repeaters
Cable TV transmission lines
Cables
*Cables (mechanical)+ ===> Instead use
     Mechanical cables
Cache memories
*CAD+ ===> Instead use
     Design automation
CADCAM
Cadmium
Cadmium alloys
Cadmium compounds
*CAE+ ===> Instead use
     Computer aided engineering
Calcium
Calcium alloys
Calcium compounds
Calculators
Calculus
Calibration
Calorimetry
*CAM+ ===> Instead use
     Manufacturing automation
CAMAC
*Camcorders+ ===> Instead use
     Video cameras
Cameras
Cancer
Capacitance
Capacitance measurement
Capacitance transducers
Capacitive energy storage
Capacitor compensated distribution lines
Capacitor compensated transmission lines
Capacitor motors
Capacitor switching
Capacitors
*Capillaries+ ===> Instead use
     Blood vessels
Carbon
Carbon compounds
Carbon dioxide lasers
Carbon monoxide lasers
Cardiac pacemakers
Cardiography
Cardiovascular system
*Careers+ ===> Instead use
     Engineering profession
*Carrier processes+ ===> Instead use
     Charge carrier processes
Carrier sense multiaccess
Cascade circuits
Cascade control
Cascade systems
*CASE+ ===> Instead use
```

Computer aided software engineering
Case based reasoning
Cassegrain antennas+ ===> Instead use
        Multireflector antennas
Cathodes
Cathode-ray oscilloscopes+ ===> Instead use
        Oscilloscopes
Cathode-ray tubes
Cathodoluminescence
Causality
Cavities
Cavity perturbation methods
Cavity resonator filters
Cavity resonators
*CCD+ ===> Instead use
        Charge coupled devices
CCIR
CCITT
CD recording
*CDMA+ ===> Instead use
        Code division multiaccess
CD-ROMs
*Cell biology+ ===> Instead use
        Biological cells
Cellular automata
*Cellular land mobile radio+ ===> Instead use
        Land mobile radio cellular systems
Cellular logic
Cellular logic arrays
Cellular neural networks
*CELP+ ===> Instead use
        Linear predictive coding
Cement industry
Centralized control
Cepstral analysis
Ceramic capacitors
Ceramic insulation
Ceramic insulators
Ceramics
Ceramics industry
Cerebellar model arithmetic computers
*Cerebellar model articulation controllers+ ===> Instead use
        Cerebellar model arithmetic computers
Cerenkov detectors
*Cerenkov lasers+ ===> Instead use
        Free electron lasers
Cerenkov radiation
Cerium
Cerium alloys
Cerium compounds
*Cermets+ ===> Instead use
        Ceramics
Certification
Cesium
Cesium alloys
Cesium compounds
*Chalcogenide glasses+ ===> Instead use

Amorphous semiconductors
Channel bank filters
*Channel capacity+ ===> Instead use
        Information rates
Channel coding
*Channel waveguides+ ===> Instead use
        Optical strip waveguides
Chaos
Character generation
Character recognition
Charge carrier density
Charge carrier lifetime
Charge carrier mobility
Charge carrier processes
Charge carrier waves
Charge coupled devices
Charge coupled image sensors
Charge injection
Charge injection devices
Charge injection image sensors
Charge measurement
*Charge priming devices+ ===> Instead use
        Charge transfer devices
Charge transfer
Charge transfer devices
Charge transfer image sensors
Chebyshev approximation
Chebyshev filters
Chebyshev functions
Chemical analysis
Chemical industry
Chemical lasers
*Chemical technology+ ===> Instead use
        Chemical industry
Chemical transducers
*Chemical vapor deposition+ ===> Instead use
        CVD
Chemistry
Chest imaging
Children
Chinese and Japanese characters
Chiral media
Chirowaveguides
Chirp modulation
Chirp radar
Chlorine
Chlorine compounds
*Chokes+ ===> Instead use
        Inductors
Choppers
Chromatography
Chromium
Chromium alloys
Chromium compounds
*Chromosomes+ ===> Instead use
        Biological cells
Chua circuit

```
*CID+ ===> Instead use
     Charge injection devices
*CIM+ ===> Instead use
     Computer integrated manufacturing
Circuit analysis
*Circuit boards+ ===> Instead use
     Printed circuits
Circuit breaker testing
Circuit breakers
*Circuit complexity+ ===> Instead use
     Complexity theory
*Circuit design+ ===> Instead use
     Circuit synthesis
*Circuit design (CAD)+ ===> Instead use
     Design automation
*Circuit design (integrated circuit)+ ===> Instead use
     Integrated circuit design
*Circuit design (logic)+ ===> Instead use
     Logic design
Circuit functions
Circuit modeling
Circuit noise
Circuit optimization
Circuit reliability
*Circuit sensitivity analysis+ ===> Instead use
     Sensitivity
Circuit simulation
Circuit stability
Circuit switching (communication systems)
Circuit synthesis
Circuit testing
*Circuit tolerance analysis+ ===> Instead use
     Tolerance analysis
Circuit topology
Circuit transient analysis
Circuit tuning
Circuits
Circular arrays
Circular waveguides
Circulators
*Circulatory system+ ===> Instead use
     Cardiovascular system
Client-server systems
*Climate+ ===> Instead use
     Meteorology
*Clinical laboratories+ ===> Instead use
     Biomedical laboratories
*Clock synchronization+ ===> Instead use
     Synchronization
Clocks
Closed loop systems
Clouds
Clustering methods
Clutter
*CMAC+ ===> Instead use
     Cerebellar model arithmetic computers
*CML+ ===> Instead use
```

```
     Current mode logic
CMOS analog integrated circuits
CMOS digital integrated circuits
CMOS integrated circuits
CMOS memory integrated circuits
CMOSFET amplifiers
CMOSFET circuits
CMOSFET logic devices
CMOSFET oscillators
CMOSFET power amplifiers
CMOSFET switches
CMOSFETs
Coal
Coatings
Coaxial aperture antennas
Coaxial components
Coaxial connectors
Coaxial couplers
Coaxial resonators
Coaxial transmission line discontinuities
Coaxial transmission lines
Coaxial waveguides
Cobalt
Cobalt alloys
Cobalt compounds
Cochannel interference
Code converters
Code division multiaccess
Code division multiplexing
*Code excited linear prediction+ ===> Instead use
     Linear predictive coding
Codecs
*Coder-decoders+ ===> Instead use
     Codecs
Codes
*Coding+ ===> Instead use
     Encoding
Coercive force
Cogeneration
Cognitive science
Coilgun power supplies
Coilguns
Coils
Coincidence circuits
Cold cathode tubes
Collaborative work
Colliding beam devices
Collision processes
Color
*Color center lasers+ ===> Instead use
     Solid lasers
Color graphics
Color measurement
*Color TV+ ===> Instead use
     TV
Comb filters
Combinational logic circuit fault diagnosis
```

Combinational logic circuit fault tolerance
Combinational logic circuit testing
Combinational logic circuits
Combinatorial mathematics
*COMFET+ ===> Instead use
     Insulated gate bipolar transistors
Command and control systems
Command languages
*Commerce+ ===> Instead use
     Business
*Commercial power systems+ ===> Instead use
     Industrial power systems
Communicating sequential processes
Communication
   SN   Use only when the nature or content of the communication is
considered
Communication aids
*Communication cables+ ===> Instead use
     Wire communication cables
*Communication cables (optical)+ ===> Instead use
     Optical fiber cables
Communication channels
*Communication complexity+ ===> Instead use
     Complexity theory
Communication engineering education
Communication equipment
Communication equipment testing
Communication industry
*Communication networks+ ===> Instead use
     Communication systems
*Communication protocols+ ===> Instead use
     Protocols
*Communication satellites+ ===> Instead use
     Satellite communication
Communication standards
Communication switching
Communication system control
Communication system economics
Communication system fault diagnosis
Communication system fault tolerance
Communication system interfaces
Communication system maintenance
Communication system nonlinearities
Communication system operations and management
Communication system performance
Communication system planning
Communication system power supplies
*Communication system privacy+ ===> Instead use
     Communication system security
Communication system reliability
Communication system routing
Communication system security
Communication system signaling
Communication system software
Communication system traffic
Communication systems
Communication terminals

```
Commutated circuits
Commutatorless DC motors
*Compact disk read only memories+ ===> Instead use
      CD-ROMs
*Compact disk systems+ ===> Instead use
      CD recording
Companding
Comparators
Compensation
Compilers (silicon)
*Compilers (program)+ ===> Instead use
      Program compilers
Complementary circuits
*Complementary MOS+ ===> Instead use
      CMOSFETs
Complexity theory
Compliance control
Composite insulation
*Composite media+ ===> Instead use
      Nonhomogeneous media
*Composite systems+ ===> Instead use
      Interconnected systems
Compressed air energy storage
Compressors
Compton scattering
Compulsators
Computation theory
Computation time
*Computational complexity+ ===> Instead use
      Complexity theory
Computational geometry
Computer aided analysis
*Computer aided design+ ===> Instead use
      Design automation
Computer aided engineering
Computer aided instruction
*Computer aided manufacturing+ ===> Instead use
      Manufacturing automation
Computer aided software engineering
*Computer animation+ ===> Instead use
      Animation
Computer applications
Computer architecture
*Computer arithmetic+ ===> Instead use
      Digital arithmetic
*Computer automated measurement and control+ ===> Instead use
      CAMAC
*Computer buses+ ===> Instead use
      Data buses
*Computer control+ ===> Instead use
      Digital control
Computer crime
Computer displays
*Computer documentation+ ===> Instead use
      Documentation
Computer economics
*Computer engineering education+ ===> Instead use
```

Computer science education
Computer facilities
Computer fault diagnosis
Computer fault tolerance
Computer graphics
*Computer graphics languages+ ===> Instead use
        Visual languages
Computer graphics software
Computer industry
Computer input-output
Computer instructions
Computer integrated manufacturing
Computer interface human factors
Computer interfaces
    SN   For human interfaces, see "User interfaces"
Computer languages
Computer maintenance
*Computer music+ ===> Instead use
        Music
Computer network management
Computer network performance
Computer network reliability
Computer network security
Computer networks
*Computer operating systems+ ===> Instead use
        Operating systems
Computer performance
Computer peripherals
*Computer pipeline processing+ ===> Instead use
        Pipeline processing
Computer power supplies
*Computer programming+ ===> Instead use
        Programming
*Computer programming profession+ ===> Instead use
        Programming profession
Computer reliability
Computer science
Computer science education
Computer security
*Computer software+ ===> Instead use
        Software
*Computer terminals+ ===> Instead use
        Computer peripherals
Computer testing
Computer viruses
*Computer vision+ ===> Instead use
        Machine vision
Computers
Concatenated coding
Concurrency control
Concurrent engineering
Conducting bodies
Conducting films
Conducting liquids
Conducting materials
*Conducting strips+ ===> Instead use
        Strip conductors

Conductivity
Conductivity measurement
Conductors
Cones
*Conferences+ ===> Instead use
     Meetings
Conformal antennas
Conformance testing
Conical antennas
Conjugate gradient methods
Connectors
Consecutive system reliability
Construction industry
Consumer electronics
Consumer products
Contact mechanical factors
   SN   Use for electrical contacts only
Contact resistance
Contactors
Contacts
*Content addressable memories+ ===> Instead use
     Associative memories
Continued fractions
Continuing education
Continuous phase modulation
Continuous time filters
Continuous time systems
Contracts
Control cables
Control engineering
Control engineering education
Control equipment
Control system human factors
Control systems
Controllability
Convergence of numerical methods
Converters
Conveyors
Convolution
Convolutional codes
Convolvers
Cooling
Cooperative systems
*Cooperative work+ ===> Instead use
     Collaborative work
*Coplanar strip+ ===> Instead use
     Coplanar transmission lines
Coplanar transmission lines
Coplanar waveguides
Copper
Copper alloys
Copper compounds
Coprocessors
Copyright protection
Cordless telephone systems
*Cores+ ===> Instead use
     Magnetic cores

Corona
Correlation
*Correlation detection+ ===> Instead use
      Correlators
Correlators
Corrosion
Corrosion testing
Corrugated antennas
Corrugated horn antennas
Corrugated surfaces
Corrugated waveguides
Cosine transforms
Cosmic rays
           radiation effects" was used
Cost optimal control
*Costas arrays+ ===> Instead use
      Permutation matrices
Costas loops
Costs
*Counters+ ===> Instead use
      Radiation detectors
Counting circuits
Coupled mode analysis
Coupled transmission lines
Couplers
   SN   Use for physical device only
*Coupling+ ===> Instead use
      Electromagnetic coupling
Coupling circuits
Courseware
Covariance analysis
Covariance factorization
Covariance functions
Covariance matrices
*CPM+ ===> Instead use
      Continuous phase modulation
*CPW+ ===> Instead use
      Coplanar waveguides
Crack detection
*Crops+ ===> Instead use
      Agriculture
*Cross entropy minimization+ ===> Instead use
      Minimum entropy methods
Cross linked insulation
Cross linked polyethylene insulation
Cross modulation distortion
Crossed field devices
Crosstalk
*CRT+ ===> Instead use
      Cathode-ray tubes
Cryogenic electronics
Cryogenics
Cryptography
*Crystal filters+ ===> Instead use
      Piezoelectric resonator filters
Crystal growth
*Crystal oscillators+ ===> Instead use

```
      Piezoelectric resonator oscillators
*Crystal resonators+ ===> Instead use
      Piezoelectric resonators
Crystals
*CSMA+ ===> Instead use
      Carrier sense multiaccess
*CSP+ ===> Instead use
      Communicating sequential processes
*Cumulants+ ===> Instead use
      Higher order statistics
Current
Current comparators
Current control
Current conveyors
Current density
Current distribution
Current limiters
Current measurement
*Current measurement (water)+ ===> Instead use
      Sea measurements
Current mode logic
*Current regulation+ ===> Instead use
      Current control
Current supplies
Current transformers
Curve fitting
*Curved waveguides+ ===> Instead use
      Waveguide bends
*Custom integrated circuits+ ===> Instead use
      Application specific integrated circuits
Cutting
CVD
CW lasers
CW radar
Cybernetics
Cyclic codes
Cyclic reservation multiaccess
*Cycloconverters+ ===> Instead use
      AC-AC power conversion
Cyclotron radiation
Cyclotron resonance
Cyclotrons
Cylinders
Cylindrical antennas
Cylindrical arrays
*Cylindrical magnetic domains+ ===> Instead use
      Magnetic bubble domains
*Cylindrical waveguides+ ===> Instead use
      Circular waveguides
DAMA+ ===> Instead use
      Demand assigned multiaccess
Data acquisition
Data buses
Data communication
Data compression
Data conversion
Data flow analysis
```

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Data flow computing
Data flow graphs
Data handling
Data management
Data models
Data processing
Data security
Data structures
Data transmission+ ===> Instead use
     Data communication
Database concurrency operations
Database fault tolerance
Database languages
Database machines
Database management systems
Database query processing
Database reliability
Database scheduling
Database searching
Database systems
DBS+ ===> Instead use
     Satellite broadcasting
DC amplifiers
DC circuit breakers
DC generators
DC machines
DC measurements+ ===> Instead use
     Electric variables measurement
DC motor drives
DC motor protection
DC motors
DC power systems
DC power transmission
DCT+ ===> Instead use
     Discrete cosine transforms
DC-AC power conversion
DC-DC power conversion
Deadlocks (computers)+ ===> Instead use
     Concurrency control
Deadlocks (computers)+ ===> Instead use
     System recovery
Decentralized control+ ===> Instead use
     Distributed control
Decision feedback communication+ ===> Instead use
     Feedback communication
Decision feedback equalizers
Decision support systems
Decision-making
Decoding
Deconvolution
Decorrelation
Decoupling of systems
Deductive databases
Defibrillators
Definitions+ ===> Instead use
     Terminology
Deformation+ ===> Instead use
```

```
      Strain
Delaunay triangulation+ ===> Instead use
      Mesh generation
Delay circuits
Delay effects
Delay equalizers
Delay estimation
Delay filters
Delay lines
Delay lock loops
Delay systems
Delta modulation
Demand assigned multiaccess
Demodulation
           terms (now under "Modulation") was used
Demodulators+ ===> Instead use
      Demodulation
Demography
Demultiplexing
Density measurement
Dentistry
Depth first search+ ===> Instead use
      Tree searching
Describing functions
Descriptor systems+ ===> Instead use
      Singular systems
Desert regions
Design automation
Design centering
Design for testability
Design methodology
Desktop publishing
Detection (demodulation)+ ===> Instead use
      Demodulation
Detection (signal)+ ===> Instead use
      Signal detection
Detectors
Determinants
Deterministic algorithms
Deuterium
Deuterium compounds
Deuterons+ ===> Instead use
      Ions
Developing nations
Dexterous manipulators
DFT+ ===> Instead use
      Discrete Fourier transforms
Diacs+ ===> Instead use
      Thyristors
Diagnosis (fault)+ ===> Instead use
      Fault diagnosis
Diagnosis (medical)+ ===> Instead use
      Medical diagnosis
Diagnostic expert systems
   SN   See "Medical expert systems" for medical diagnosis applications
Diagnostic reasoning
Diakoptics+ ===> Instead use
```

Circuit topology
Diamond
Diathermy+ ===> Instead use
       Hyperthermia
Dichroic reflectors+ ===> Instead use
       Frequency selective surfaces
Die attach+ ===> Instead use
       Microassembly
Die bonding+ ===> Instead use
       Microassembly
Dielectric antennas
Dielectric bodies
Dielectric breakdown
Dielectric devices
Dielectric films
Dielectric heating
Dielectric hysteresis
Dielectric liquids
Dielectric loaded antennas
Dielectric loaded waveguides
Dielectric losses
Dielectric materials
Dielectric measurements
Dielectric polarization
Dielectric radiation effects
Dielectric resonator filters
Dielectric resonator oscillators
Dielectric resonators
Dielectric strength+ ===> Instead use
       Dielectric breakdown
Dielectric thermal factors
Dielectric waveguides
Diesel driven generators
Diesel engines
Difference equations
Differential amplifiers
Differential analyzers
Differential equations
Differential games
Differential geometry
Differential phase shift keying
Differential pulse code modulation
Differential Riccati equations
Differential transformers
Differentiating circuits
Differentiation (mathematics)
Diffraction
Diffusion equations
Diffusion processes
Digestive system
Digital arithmetic
Digital audio broadcasting
Digital circuits
Digital communication
Digital control
Digital filter stability+ ===> Instead use
       Digital filter wordlength effects

Digital filter wordlength effects
Digital filters
Digital image processing+ ===> Instead use
     Image processing
Digital integrated circuits
Digital magnetic recording
Digital measurements
Digital modulation
Digital radio
Digital recording
Digital sequences+ ===> Instead use
     Sequences
Digital signal processors
Digital signals+ ===> Instead use
     Signals
Digital system fault diagnosis
Digital system fault tolerance
Digital system testing
Digital systems
Digital transmission+ ===> Instead use
     Digital communication
Digital TV
Digital-analog conversion
Dining philosophers problem+ ===> Instead use
     Concurrency control
Diode lasers+ ===> Instead use
     Semiconductor lasers
Diodes
Diplexers
Dipole antennas
Dipole arrays
Direct broadcast satellites+ ===> Instead use
     Satellite broadcasting
Direct sequence spread spectrum communication+ ===> Instead use
     Pseudonoise coded communication
Direct sequence spread spectrum radar+ ===> Instead use
     Spread spectrum radar
Directed graphs
Direction of arrival estimation
Directional antennas+ ===> Instead use
     Directive antennas
Directional couplers
Direction-finding+ ===> Instead use
     Navigation
Directive antennas
Disarmament+ ===> Instead use
     Arms control
Discharges+ ===> Instead use
     Gas discharges
Disconnecting switches
Discontinuities
Discontinuous systems+ ===> Instead use
     Jump parameter systems
Discrete cosine transforms
Discrete event simulation
Discrete event systems
Discrete Fourier transforms

Discrete Hartley transforms
Discrete Hilbert transforms
Discrete Radon transforms
Discrete time filters
Discrete time Riccati equations
Discrete time signals+ ===> Instead use
    Signals
Discrete time systems
Discrete transforms
Diseases
Disk drives
Disk recording
Disks
Dispatching
Dispersed storage and generation
Dispersive channels
Dispersive media
Displacement control
Displacement measurement
Display human factors
Displays
Dissipative circuits+ ===> Instead use
    Lossy circuits
Dissipative media+ ===> Instead use
    Absorbing media
Dissipative systems+ ===> Instead use
    Lossy systems
Distance measurement
Distance relays+ ===> Instead use
    Protective relaying
Distortion
Distributed algorithms
Distributed amplifiers
Distributed antennas+ ===> Instead use
    Antenna arrays
Distributed arithmetic
Distributed Bragg reflector lasers
Distributed computing
Distributed control
Distributed database concurrency operations
Distributed database fault tolerance
Distributed database management systems
Distributed database query processing
Distributed database reliability
Distributed database scheduling
Distributed database searching
Distributed database systems
Distributed databases
Distributed decision-making
Distributed detection
Distributed estimation
Distributed feedback devices
Distributed feedback lasers
Distributed feedback oscillators
Distributed information systems
Distributed memories
Distributed memory systems

```
Distributed operating systems+ ===> Instead use
     Network operating systems
Distributed parameter circuits
Distributed parameter filters
Distributed parameter systems
Distributed tracking
Distribution functions+ ===> Instead use
     Probability
Distribution of electric power+ ===> Instead use
     Power distribution
Dither techniques
Diversity methods
Diving equipment+ ===> Instead use
     Underwater work systems
Division
DM+ ===> Instead use
     Delta modulation
DNA
DOA estimation+ ===> Instead use
     Direction of arrival estimation
Document delivery
Document handling
Document image processing
          were used
Documentation
Domains+ ===> Instead use
     Magnetic domains
Domestic appliances+ ===> Instead use
     Home appliances
Doping
Doppler effect
Doppler measurements
Doppler radar
Dosimetry
DPCM+ ===> Instead use
     Differential pulse code modulation
DPSK+ ===> Instead use
     Differential phase shift keying
DRAM chips
Drift chambers+ ===> Instead use
     Ionization chambers
Drilling+ ===> Instead use
     Materials processing
Driver circuits
Driver information systems
Drivers+ ===> Instead use
     Driver circuits
Drives
Driving point functions+ ===> Instead use
     Circuit functions
DRO+ ===> Instead use
     Dielectric resonator oscillators
Drug delivery systems
Drugs
Dual codes
Dual reflector antennas+ ===> Instead use
     Multireflector antennas
```

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Duality
Duplexers
Dye lasers
Dyes
Dynamic programming
Dynamic response
Dynamic stability+ ===> Instead use
     Power system dynamic stability
Dynamics
Dysprosium
Dysprosium alloys
Dysprosium compounds
EAROM+ ===> Instead use
     EPROM
Earphones+ ===> Instead use
     Headphones
Ears+ ===> Instead use
     Auditory system
Earth
Earth atmosphere+ ===> Instead use
     Terrestrial atmosphere
Earthquakes
Earth-ionosphere waveguide
ECCM+ ===> Instead use
     Electronic countermeasures
ECG+ ===> Instead use
     Electrocardiography
Echo interference
Echo suppression
Echocardiography
Echoencephalography
ECL+ ===> Instead use
     Emitter coupled logic
ECM+ ===> Instead use
     Electronic countermeasures
Ecology+ ===> Instead use
     Environmental factors
Economic dispatch+ ===> Instead use
     Power generation dispatch
Economics
Eddy current testing
Eddy currents
EDTV+ ===> Instead use
     HDTV
Education
Educational technology
Educational TV
EEG+ ===> Instead use
     Electroencephalography
EEPROM+ ===> Instead use
     EPROM
Effort optimal control+ ===> Instead use
     Minimum effort control
EGG+ ===> Instead use
     Electroglottography
EHV cables+ ===> Instead use
     EHV transmission lines
```

EHV circuit breakers
EHV insulation
EHV insulators
EHV measurements
EHV substations
EHV transformers
EHV transmission
EHV transmission lines
Eigenfunctions+ ===> Instead use
     Eigenvalues and eigenfunctions
Eigenstructure assignment
Eigenvalues and eigenfunctions
Eigenvectors+ ===> Instead use
     Eigenvalues and eigenfunctions
Electrets
Electric automobiles+ ===> Instead use
     Road vehicle electric propulsion
Electric breakdown
Electric control equipment
Electric discharge pumping
Electric field effects
Electric field measurement
Electric fields
Electric heating+ ===> Instead use
     Resistance heating
Electric machines
Electric power+ ===> Instead use
     Power systems
Electric shock
Electric utilities+ ===> Instead use
     Power industry
Electric variables
Electric variables control
Electric variables measurement
Electrical contacts+ ===> Instead use
     Contacts
Electrical engineering
Electrical engineering education
Electrical equipment enclosures
Electrical equipment industry
Electrical insulation+ ===> Instead use
     Insulation
Electrically alterable read only memory+ ===> Instead use
     EPROM
Electrically erasable programmable read only memory+ ===> Instead use
     EPROM
Electroabsorption
Electroacoustic correlators+ ===> Instead use
     Acoustoelectric correlators
Electroacoustic delay lines+ ===> Instead use
     Acoustoelectric delay lines
Electroacoustic devices+ ===> Instead use
     Acoustoelectric devices
Electroacoustic effects+ ===> Instead use
     Acoustoelectric effects
Electroacoustic transducers+ ===> Instead use
     Acoustoelectric transducers

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Electrobiology+ ===> Instead use
     Bioelectric phenomena
Electrocardiography
Electrochemical analysis
Electrochemical devices
Electrochemical electrodes
Electrochemical processes
Electrochromic devices
Electrochromic displays
Electrochromic windows+ ===> Instead use
     Electrochromic devices
Electrochromism
Electrodes
Electrodynamics
Electroencephalography
Electroexplosive devices
Electroglottography
Electrohydraulics
Electroluminescence
Electroluminescent devices
Electrolysis+ ===> Instead use
     Electrochemical processes
Electrolytic capacitors
Electromagnet power supplies
Electromagnetic analysis
Electromagnetic atmospheric interference
Electromagnetic beams+ ===> Instead use
     Beams
Electromagnetic capacitive interference+ ===> Instead use
     Electromagnetic reactive interference
Electromagnetic compatibility
Electromagnetic conductive interference
Electromagnetic coupling
Electromagnetic diffraction
Electromagnetic engineering education
Electromagnetic fields
Electromagnetic forces
Electromagnetic guns+ ===> Instead use
     Electromagnetic launching
Electromagnetic heating
Electromagnetic induction
Electromagnetic inductive interference+ ===> Instead use
     Electromagnetic reactive interference
Electromagnetic interference
Electromagnetic launching
Electromagnetic launching power supplies
Electromagnetic measurements
Electromagnetic noise+ ===> Instead use
     Electromagnetic interference
Electromagnetic propagation
Electromagnetic propagation in absorbing media
Electromagnetic propagation in anisotropic media
Electromagnetic propagation in dispersive media
Electromagnetic propagation in magnetic media
Electromagnetic propagation in nonhomogeneous media
Electromagnetic propagation in nonlinear media
Electromagnetic propagation in nonreciprocal media+ ===> Instead use
```

Nonreciprocal wave propagation
Electromagnetic propagation in plasma media
Electromagnetic propagation in random media
Electromagnetic propulsion+ ===> Instead use
    Electromagnetic launching
Electromagnetic pulse+ ===> Instead use
    EMP radiation effects
Electromagnetic pulse propagation+ ===> Instead use
    Electromagnetic transient propagation
Electromagnetic pulse scattering+ ===> Instead use
    Electromagnetic transient scattering
Electromagnetic radiation
Electromagnetic radiation effects
Electromagnetic radiative interference
Electromagnetic reactive interference
Electromagnetic reflection
Electromagnetic refraction
Electromagnetic scattering
Electromagnetic scattering by absorbing media
Electromagnetic scattering by anisotropic media
Electromagnetic scattering by dispersive media
Electromagnetic scattering by magnetic media
Electromagnetic scattering by nonhomogeneous media
Electromagnetic scattering by nonlinear media
Electromagnetic scattering by periodic structures
Electromagnetic scattering by plasma media
Electromagnetic scattering by random media
Electromagnetic scattering by rough surfaces
Electromagnetic scattering inverse problems
Electromagnetic shielding
Electromagnetic surface waves
Electromagnetic tomography
Electromagnetic transient analysis
Electromagnetic transient propagation
Electromagnetic transient scattering
Electromagnets
Electromechanical effects
Electromigration
Electromyography
Electron accelerators
Electron beam applications
Electron beam deflection
Electron beam focusing
Electron beam lithography
Electron beam pumping
Electron beam semiconductor devices
Electron beams
Electron carriers+ ===> Instead use
    Charge carrier processes
Electron cyclotron resonance+ ===> Instead use
    Cyclotron resonance
Electron detectors
Electron emission
Electron guns
Electron injection+ ===> Instead use
    Charge injection
Electron lenses

Electron linear accelerators
Electron microscopy
Electron multipliers
Electron optics
Electron radiation effects
Electron rectifiers
Electron rings+ ===> Instead use
     Electron storage rings
Electron sources
Electron spectroscopy
Electron spectroscopy detectors
Electron spin resonance+ ===> Instead use
     Magnetic resonance
Electron storage rings
Electron synchrotrons
Electron tubes
Electronic books+ ===> Instead use
     Electronic publishing
Electronic countermeasures
Electronic counter-countermeasures+ ===> Instead use
     Electronic countermeasures
Electronic data interchange
Electronic equipment
Electronic equipment manufacture
Electronic equipment testing
Electronic journals+ ===> Instead use
     Electronic publishing
Electronic mail
Electronic publishing
Electronic switching systems
Electronic warfare
Electronics
Electronics engineering education
Electronics industry
Electrons
Electrooculography
Electrooptic deflectors
Electrooptic devices
Electrooptic effects
Electrooptic filters
Electrooptic Kerr effect
Electrooptic measurements
Electrooptic memories
Electrooptic modulation
Electrooptic switches
Electrooptic transducers
Electrophoresis
Electrophotography
Electrophotoluminescence+ ===> Instead use
     Photoluminescence
Electroprinting
Electrostatic accelerators
Electrostatic analysis
Electrostatic devices
Electrostatic discharges
Electrostatic focusing
Electrostatic induction

```
Electrostatic interference
Electrostatic lenses
Electrostatic measurements
Electrostatic precipitators
Electrostatic processes
Electrostriction
Electrothermal effects
Electrothermal launching
Electrothermal launching power supplies
Elementary particles
Elevated antennas+ ===> Instead use
     Antenna proximity factors
Elevators
Ellipsoids
Ellipsometers+ ===> Instead use
     Ellipsometry
Ellipsometry
Elliptic filters
Elliptical waveguides
EMC+ ===> Instead use
     Electromagnetic compatibility
Emergency power generators+ ===> Instead use
     Standby generators
Emergency power supplies
Emergency services
EMG+ ===> Instead use
     Electromyography
EMI+ ===> Instead use
     Electromagnetic interference
Emission
Emitter coupled logic
EMP radiation effects
Employment
EMS+ ===> Instead use
     Medical services
Enamel insulated wires
Encapsulation
Encephalography
Enclosures (electrical equipment)+ ===> Instead use
     Electrical equipment enclosures
Encoding
Endfire antennas
Endocrine system+ ===> Instead use
     Biochemistry
Energy conservation
Energy conversion
Energy management
Energy measurement
Energy optimal control+ ===> Instead use
     Minimum energy control
Energy resources
Energy storage
Engineering
Engineering drawings
Engineering education
Engineering management+ ===> Instead use
     Research and development management
```

Engineering profession
Engineering societies
Engineering writing+ ===> Instead use
     Writing
Engines
Entropy
Entropy codes
Envelope detection
Environmental factors
Environmental radiation effects
Environmental testing
Enzymes+ ===> Instead use
     Biochemistry
EOG+ ===> Instead use
     Electrooculography
Epidemiology
Epitaxial growth
Epitaxial layers
Epoxy resin insulation
Epoxy resin insulators
          insulators" were used
Epoxy resins
Epr spectroscopy+ ===> Instead use
     Magnetic resonance spectroscopy
EPROM
Equalizers
Equations
Equatorial regions+ ===> Instead use
     Tropical regions
Equiripple filters
Equivalent circuits
Erasable programmable read only memory+ ===> Instead use
     EPROM
Erbium
Erbium alloys
Erbium compounds
Ergonomics
Error analysis
Error compensation
Error control coding+ ===> Instead use
     Error correction coding
Error correction
Error correction coding
Error detection coding
Error estimation+ ===> Instead use
     Error analysis
Error recovery (computers)+ ===> Instead use
     System recovery
Error statistics+ ===> Instead use
     Error analysis
ESCA+ ===> Instead use
     Spectrochemical analysis
ESD+ ===> Instead use
     Electrostatic discharges
ESR+ ===> Instead use
     Magnetic resonance
Estimation

```
Etching
Ethics
Ethylene-propylene materials
Ethylene-propylene rubber
Europium
Europium alloys
Europium compounds
Evidential reasoning+ ===> Instead use
     CASE based reasoning
Evoked potentials+ ===> Instead use
     Bioelectric potentials
Exception handling
Excimer lasers
Excitation of lasers+ ===> Instead use
     Laser excitation
Excitation of waveguides+ ===> Instead use
     Waveguide excitation
Excitation systems+ ===> Instead use
     AC generator excitation
Excitons
Executive programs+ ===> Instead use
     Operating systems
Exercise
Expert system shells
Expert systems
Explanation
Explosions
Explosive opening switches+ ===> Instead use
     Electroexplosive devices
Exponential distributions
Exponential stability+ ===> Instead use
     Asymptotic stability
Exponentiation
Extended definition TV+ ===> Instead use
     HDTV
Extracted beams+ ===> Instead use
     Particle beam extraction
Extrapolation
Extraterrestrial atmospheres+ ===> Instead use
     Planetary atmospheres
Extraterrestrial exploration
Extraterrestrial measurements
Extraterrestrial phenomena
Extraterrestrial plasmas
Extraterrestrial radiation effects
Extraterrestrial radio sources
Extra-high-voltage circuit breakers+ ===> Instead use
     EHV circuit breakers
Extra-high-voltage insulation+ ===> Instead use
     EHV insulation
Extra-high-voltage insulators+ ===> Instead use
     EHV insulators
Extra-high-voltage measurements+ ===> Instead use
     EHV measurements
Extra-high-voltage substations+ ===> Instead use
     EHV substations
Extra-high-voltage transformers+ ===> Instead use
```

EHV transformers
Extra-high-voltage transmission+ ===> Instead use
        EHV transmission
Extra-high-voltage transmission lines+ ===> Instead use
        EHV transmission lines
Extreme value distributions
Eyeglass lenses+ ===> Instead use
        Ophthalmic lenses
Eyes+ ===> Instead use
        Visual system
Fabrication
    SN   Use for noncommercial processes only.
    SN   For commercial manufacture, use Manufacturing.
Fabry-Perot interferometers
Fabry-Perot resonators
Face recognition
Facsimile
Factory automation+ ===> Instead use
        Manufacturing automation
Fading channels
Failure analysis
Fan filters+ ===> Instead use
        Multidimensional digital filters
Fans+ ===> Instead use
        Ventilation
Faraday effect
Farming
Fast Fourier transforms+ ===> Instead use
        Discrete Fourier transforms
Fast transforms+ ===> Instead use
        Discrete transforms
FASTBUS
Fatigue
Fault current limiters
Fault currents
Fault diagnosis
Fault location
Fault tolerance
Fault trees
FDDI
FDM+ ===> Instead use
        Frequency division multiplexing
FDMA+ ===> Instead use
        Frequency division multiaccess
FDTD methods
Feature extraction
Feedback
Feedback amplifiers
Feedback circuits
Feedback communication
Feedback lasers
Feedback systems
Feedforward amplifiers
Feedforward neural networks
Feedforward systems
Feeds
Fermat transforms+ ===> Instead use

```
      Number theoretic transforms
Ferrimagnetic films
Ferrimagnetic materials
Ferrite circulators
Ferrite devices
Ferrite films
Ferrite filters
Ferrite isolators
Ferrite loaded resonators
Ferrite loaded waveguides
Ferrite phase shifters
Ferrite waveguides
Ferrites
Ferroelectric capacitors
          materials/devices" were used
Ferroelectric devices
Ferroelectric displays
Ferroelectric films
Ferroelectric hysteresis+ ===> Instead use
     Dielectric hysteresis
Ferroelectric materials
Ferroelectric memories
Ferroelectric semiconductors
Ferromagnetic materials
Ferromagnetic resonance+ ===> Instead use
     Magnetic resonance
Ferroresonance
Ferroresonant circuits
FET amplifiers
FET analog integrated circuits
FET circuits
FET digital integrated circuits
FET integrated circuits
FET logic devices
FET memory integrated circuits
FET oscillators
FET switches
FETs
Fetuses+ ===> Instead use
     Obstetrics
FFT+ ===> Instead use
     Discrete Fourier transforms
Fiber distributed data interface+ ===> Instead use
     FDDI
Fiber optics+ ===> Instead use
     Optical fibers or terms beginning "Optical fiber..."
Field buses
Field effect transistors+ ===> Instead use
     FETs
Field electron emission+ ===> Instead use
     Electron emission
Field ion emission+ ===> Instead use
     Ion emission
Field programmable gate arrays
Fields (algebraic)
File servers
File systems
```

```
Films
Filter distortion
Filter noise
Filtering
     SN   Use for filtering theory.
Filters
Finance
Financial data processing
Fingerprint identification
Fingers+ ===> Instead use
     Dexterous manipulators
Finite automata
Finite difference methods
Finite difference time domain methods+ ===> Instead use
     FDTD methods
Finite duration impulse response digital filters+ ===> Instead use
     FIR digital filters
Finite element methods
Finite state machines
Finite wordlength effects
Finline
Finline circuits
Finline components
Finline couplers
Finline discontinuities
Finline filters
Finline resonators
Finline transitions
FIR digital filter stability+ ===> Instead use
     Digital filter wordlength effects
FIR digital filters
Fire control systems
Fires
Firmware+ ===> Instead use
     Microprogramming
Fish+ ===> Instead use
     Marine animals
Fisheries+ ===> Instead use
     Aquaculture
Fission reactor accidents+ ===> Instead use
     Fission reactor safety
Fission reactor control and monitoring
Fission reactor cooling and heat recovery
Fission reactor measurements
Fission reactor operation
Fission reactor safety
Fission reactors
Fixed point arithmetic
Flames+ ===> Instead use
     Fires
Flashover
Flat panel displays
Flaw detection
Flexible manufacturing systems
Flexible structures
Flight control+ ===> Instead use
     Aerospace control
```

Flight simulation+ ===> Instead use
     Aerospace simulation
Flip-chip devices
Flip-flop memories
Flip-flops
Floating point arithmetic
Floppy disks
Flow+ ===> Instead use
     Fluid flow
Flow control
Flow graphs
Flow networks+ ===> Instead use
     Networks
Flowcharts
Fluid dynamics+ ===> Instead use
     Hydrodynamics
Fluid flow
Fluid flow control
Fluid flow measurement
Fluidics
Fluids
Fluorescence
Fluorescence spectroscopy
Fluorescent lamps
Fluorine
Fluorine compounds
Flush mounted antennas+ ===> Instead use
     Conformal antennas
Flux measurement (magnetic)+ ===> Instead use
     Magnetic field measurement
Flywheels
FM+ ===> Instead use
     Frequency modulation
FM distortion
FM noise
FM radar
FMR+ ===> Instead use
     Magnetic resonance
Focusing
Fokker-Planck equations
Food industry
Force
Force control
Force measurement
Forecasting
Forestry
Formal languages
Formal logic+ ===> Instead use
     Logic
Formula manipulation+ ===> Instead use
     Symbol manipulation
FORTRAN
Forward error correction
Fossil fuel power generation+ ===> Instead use
     Thermal power generation
Fossil fuels+ ===> Instead use
     Fuels

```
Fourier series
Fourier spectroscopy
Fourier transforms
Fourier-Bessel transforms+ ===> Instead use
     Hankel transforms
FPGA+ ===> Instead use
     Field programmable gate arrays
Fractals
Frame relay
Frame synchronization
Fredholm integral equations
Free electron lasers
Frequency
Frequency allocation+ ===> Instead use
     Radio spectrum management
Frequency control
Frequency conversion
Frequency division+ ===> Instead use
     Frequency conversion
Frequency division multiaccess
Frequency division multiplexing
Frequency domain analysis
Frequency domain synthesis
Frequency estimation
Frequency hop communication
Frequency hop radar+ ===> Instead use
     Spread spectrum radar
Frequency independent antennas+ ===> Instead use
     Log periodic antennas
Frequency locked loops
Frequency measurement
Frequency modulation
Frequency multiplication+ ===> Instead use
     Frequency conversion
Frequency regulation+ ===> Instead use
     Frequency control
Frequency response
Frequency selective surfaces
Frequency shift keying
Frequency stability
Frequency synthesizers
Friction
FSK+ ===> Instead use
     Frequency shift keying
Fuel cells
Fuel optimal control
Fuel rate control+ ===> Instead use
     Fuel optimal control
Fuels
Fullerene compounds
Fullerenes
Function generators+ ===> Instead use
     Signal generators
Functional analysis
Functional languages
Functional programming
Functions
```

Furnaces
Fuses
Fusion power generation
Fusion power generation safety
Fusion reactors
Fuzzy control
Fuzzy logic
Fuzzy neural networks
Fuzzy sets
Fuzzy systems
Gadolinium
Gadolinium alloys
Gadolinium compounds
Gain control
Gain measurement
Gait assessment+ ===> Instead use
      Legged locomotion
Galaxies
Galerkin method
Gallium
Gallium alloys
Gallium compounds
Galois fields
Galvanomagnetism+ ===> Instead use
      Magnetoelectric effects
Game theory
Games
Gamma distributions
Gamma rays
Gamma-ray astronomy
Gamma-ray astronomy detectors
Gamma-ray detectors
Gamma-ray effects
Gamma-ray imaging+ ===> Instead use
      Nuclear imaging
Gamma-ray spectroscopy
Gamma-ray spectroscopy detectors
Garbage collection (computers)+ ===> Instead use
      Memory management
Garnet films
Garnets
Gas blast circuit breakers
Gas blast interrupters
Gas bubbles+ ===> Instead use
      Bubbles
Gas circuit breakers
Gas detectors
Gas discharge devices
Gas discharge displays
Gas discharges
Gas flow+ ===> Instead use
      Fluid flow
Gas industry+ ===> Instead use
      Natural gas industry
Gas insulated substations
Gas insulated switchgear
Gas insulated transformers

Gas insulation
Gas interrupters
Gas lasers
Gas leak detection
Gas turbines
Gases
Gateways+ ===> Instead use
     Network servers
Gaussian beams
Gaussian channels
Gaussian distributions
Gaussian noise
Gaussian processes
Gauss-Seidel method
Gears
Geiger counters
GEMFET+ ===> Instead use
     Insulated gate bipolar transistors
Generalized functions
Generation of electric power+ ===> Instead use
     Power generation
Generators
Genetic algorithms
Genetics
Geodesy
Geographic information systems
Geologic measurements
Geology
Geomagnetism
Geometric modeling
Geometric programming
Geometric reasoning+ ===> Instead use
     Spatial reasoning
Geometrical optics
Geometrical theory of diffraction
Geometry
Geometry codes
Geophysical inverse problems
Geophysical measurements
Geophysical signal processing
Geophysical tomography
Geophysics
Geothermal energy
Geothermal power generation
Geriatrics
Germanium
Germanium alloys
Germanium compounds
Germanium radiation detectors
Gettering
Getters+ ===> Instead use
     Gettering
Giant magnetoresistance
Glass
   SN   For semiconductor glasses, use "Amorphous semiconductors"
Glass ceramics+ ===> Instead use
     Ceramics

Glass industry
Global Positioning System
Glossaries+ ===> Instead use
     Terminology
Glow discharge devices
Glow discharges
Golay codes
Gold
Gold alloys
Gold compounds
Goppa codes
Government information systems
Governmental factors
Governors
GPS+ ===> Instead use
     Global Positioning System
Graded index optics
Gradient index optics+ ===> Instead use
     Graded index optics
Gradient methods
Grammars+ ===> Instead use
     Languages
Graph theory
Graphical user interfaces
Graphics
Graphite
Gratings
Gravity measurement
Gray codes
Green functions
Gregorian reflector antennas+ ===> Instead use
     Multireflector antennas
GRIN lenses+ ===> Instead use
     Graded index optics
GRIN optics+ ===> Instead use
     Graded index optics
Gripping+ ===> Instead use
     Dexterous manipulators
Ground support
Ground transportation+ ===> Instead use
     Land transportation
Ground vehicles+ ===> Instead use
     Land vehicles
Ground wave propagation
Grounding
Grounding electrodes
Group codes
Group theory
Groupware+ ===> Instead use
     Collaborative work
GTD+ ===> Instead use
     Geometrical theory of diffraction
Guaranteed cost control+ ===> Instead use
     Cost optimal control
Guided radio
Guideway transportation
Guideway transportation communication

Guideway transportation control systems
Guideway transportation electrical systems+ ===> Instead use
      Guideway transportation power systems
Guideway transportation electronics
Guideway transportation maintenance
Guideway transportation power systems
Guideway transportation propulsion
Guideway transportation reliability
Guideway transportation testing
Gunn device amplifiers
Gunn device oscillators
Gunn devices
Guns+ ===> Instead use
      Weapons
Gynecology
Gyrators
Gyroklystrons+ ===> Instead use
      Klystrons
Gyromagnetism
Gyroscopes
Gyrotrons
Gyrotropism
Haar transforms
Hacking+ ===> Instead use
      Computer crime
Hadamard matrices
Hadamard transforms
Hadrons
Hafnium
Hafnium alloys
Hafnium compounds
Hall effect
Hall effect devices
Hall mobility+ ===> Instead use
      Hall effect
Halogens
Hamming codes
Handicapped aids
Hands (robotic)+ ===> Instead use
      Dexterous manipulators
Handsets+ ===> Instead use
      Telephone sets
Handwriting recognition
Hankel matrices
Hankel transforms
Harbors+ ===> Instead use
      Marine ports and harbors
Hard disks
Hard magnetic materials+ ===> Instead use
      Permanent magnets
Hardness measurement
Hardware design languages
Harmonic analysis
Harmonic distortion
Harmonic generation+ ===> Instead use
      Frequency conversion
Hartley transforms

Hazardous areas
HDL+ ===> Instead use
     Hardware design languages
HDTV
Head
Headphones
Health care+ ===> Instead use
     Medical services
Health physics+ ===> Instead use
     Dosimetry+ ===> Instead use
     Radiation monitoring
Health (occupational)+ ===> Instead use
     Occupational health and safety
Hearing+ ===> Instead use
     Auditory system
Hearing aids
Heart+ ===> Instead use
     Cardiovascular system
Heart valves+ ===> Instead use
     Prosthetics
Heart (artificial)+ ===> Instead use
     Artificial biological organs
Heat engines
Heat pumps
Heat treatment
Heating
Heavy ion accelerators
Heavy ion beams
Heavy ion sources
Heavy ions
Hebbian learning
Helical antennas
Helical waveguides
Helices
Helicopter antennas
Helicopter communication
Helicopter control
Helicopter electrical systems+ ===> Instead use
     Helicopter power systems
Helicopter electronics
Helicopter maintenance
Helicopter power systems
Helicopter propulsion
Helicopter reliability
Helicopter testing
Helicopters
Helium
Helmholtz equations
Help systems
HEMT+ ===> Instead use
     MODFETs
Hereditary systems
Hermitian matrices
Hessian matrices
Heterodyning
Heterojunction bipolar transistors
Heterojunctions

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Heterojunctions (semiconductor)+ ===> Instead use
     Semiconductor heterojunctions
HF amplifiers
HF antennas
HF radar
HF radiation effects+ ===> Instead use
     Electromagnetic radiation effects
HF radio communication
HF radio propagation
HF receivers
HF transformers
HF transmitters
Hidden Markov models
Hierarchical systems
Higher order statistics
Highways+ ===> Instead use
     Road transportation
High-definition TV+ ===> Instead use
     HDTV
High-electron-mobility transistors+ ===> Instead use
     MODFETs
High-frequency amplifiers+ ===> Instead use
     HF amplifiers
High-frequency antennas+ ===> Instead use
     HF antennas
High-frequency radar+ ===> Instead use
     HF radar
High-frequency radiation effects+ ===> Instead use
     Electromagnetic radiation effects
High-frequency radio communication+ ===> Instead use
     HF radio communication
High-frequency radio propagation+ ===> Instead use
     HF radio propagation
High-frequency receivers+ ===> Instead use
     HF receivers
High-frequency transmitters+ ===> Instead use
     HF transmitters
High-level languages
High-level synthesis
High-pass filters
High-performance parallel interface+ ===> Instead use
     Network interfaces
High-speed electronics
High-speed integrated circuits
High-temperature effects+ ===> Instead use
     Thermal factors
High-temperature superconductors
High-temperature techniques
High-voltage techniques
Hilbert spaces
Hilbert transforms
Hip joint replacements+ ===> Instead use
     Prosthetics
HIPPI+ ===> Instead use
     Network interfaces
History
HMM+ ===> Instead use
```

```
     Hidden Markov models
Hole burning (optical)+ ===> Instead use
     Optical hole burning
Hole carriers+ ===> Instead use
     Charge carrier processes
Holmium
Holmium alloys
Holmium compounds
Holographic gratings
Holographic interferometry
Holographic memories
Holographic optical components
Holographic recording
Holography
Home appliances
Home automation
Home banking+ ===> Instead use
     Home computing
Home communication systems
Home computers+ ===> Instead use
     Microcomputers
Home computing
Home shopping+ ===> Instead use
     Home computing
Home working
Homodyne detection
Homomorphic filtering+ ===> Instead use
     Cepstral analysis
Homopolar generators
Homopolar machines
Homopolar motors
Hopfield networks
Hormones+ ===> Instead use
     Biochemistry
Horn antennas
Horn clauses
Hospitals+ ===> Instead use
     Medical services
Hot carriers
Hot electrons+ ===> Instead use
     Hot carriers
Hough transforms
Household appliances+ ===> Instead use
     Home appliances
Huffman codes
Human engineering+ ===> Instead use
     Ergonomics
Human factors
Humanities
Humidity
Humidity control
Humidity measurement
Humidity transducers
Hurwitz stability+ ===> Instead use
     Routh methods
HVDC circuit breakers
HVDC converters
```

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HVDC insulation
HVDC insulators
HVDC interrupters
HVDC substations
HVDC transmission
HVDC transmission control
HVDC transmission lines
Hybrid integrated circuit bonding
Hybrid integrated circuit fabrication
    SN   Use for commercial and noncommercial processes.
Hybrid integrated circuit interconnections
Hybrid integrated circuit packaging
Hybrid integrated circuit reliability
Hybrid integrated circuit thermal factors
Hybrid integrated circuits
Hybrid junctions
Hydraulic equipment
Hydraulic systems
Hydraulic turbines
Hydrodynamics
Hydroelectric generators
Hydroelectric power generation
Hydroelectric-thermal power generation
Hydrogen
Hydrogen compounds
Hydrogen economy
Hydrogen ions+ ===> Instead use
     Protons
Hydrologic measurements
Hydrology
Hydrophones
Hypercubes
Hypertext systems
Hyperthermia
Hysteresis
Hysteresis motor drives
Hysteresis motor protection
Hysteresis motors
H-infinity control
H-infinity optimization
IC+ ===> Instead use
     Integrated circuits
ICAD+ ===> Instead use
     Intelligent design assistants
ICAI+ ===> Instead use
     Intelligent tutoring systems
Ice
Iconic languages+ ===> Instead use
     Visual languages
Identification
Identification of persons
IDTV+ ===> Instead use
     HDTV
IEC
IEEE
IEEE professional activities
IEEE publications
```

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IEEE standards
IEEE student activities
IF amplifiers
IF systems
IGBT+ ===> Instead use
     Insulated gate bipolar transistors
IGFET+ ===> Instead use
     Insulated gate FETs
Ignition+ ===> Instead use
     Starting
IIR digital filter stability+ ===> Instead use
     Digital filter wordlength effects
IIR digital filters
Illumination+ ===> Instead use
     Lighting
Illumination control+ ===> Instead use
     Lighting control
ILS+ ===> Instead use
     Aircraft landing guidance
Image analysis
Image boundary analysis+ ===> Instead use
     Image edge analysis
Image classification
Image coding
Image color analysis
Image communication
Image compression+ ===> Instead use
     Image coding
Image converters
Image databases
Image deblurring+ ===> Instead use
     Image restoration
Image edge analysis
Image enhancement
Image generation
Image intensifiers
Image line pattern analysis
Image matching
Image motion analysis
Image object detection+ ===> Instead use
     Object detection
Image object recognition+ ===> Instead use
     Object recognition
Image orientation analysis
Image pattern recognition+ ===> Instead use
     Pattern recognition
Image processing
Image recognition
Image reconstruction
Image region analysis
Image registration
Image representations
Image resolution
Image restoration
Image sampling
Image segmentation
Image sensors
```

Image sequence analysis
Image shape analysis
Image size analysis
Image storage
Image synthesis+ ===> Instead use
     Image generation
Image texture analysis
Image transmission+ ===> Instead use
     Image communication
Imaging
Immittance converters
Immittance inverters
Impact ionization
IMPATT diode amplifiers
IMPATT diode oscillators
IMPATT diodes
Impedance
   SN   Use for electric impedance only. For acoustic property, see
"Acoustic impedance"
Impedance cardiography
Impedance converters+ ===> Instead use
     Immittance converters
Impedance imaging
Impedance inverters+ ===> Instead use
     Immittance inverters
Impedance matching
Impedance matrix
Impedance measurement
Impedance tomography
Impedance transformers+ ===> Instead use
     Impedance matching
Impedance (acoustic)+ ===> Instead use
     Acoustic impedance
Implantable biomedical devices
Implantable electrodes
Importance sampling+ ===> Instead use
     Monte Carlo methods
Impregnated insulation
Improved definition TV+ ===> Instead use
     HDTV
Impulse generation+ ===> Instead use
     Pulse generation
Impulse measurements+ ===> Instead use
     Pulse measurements
Impulse noise
Impulse response+ ===> Instead use
     Transient response
Impulse testing
Impurities
Indexes
Indium
Indium alloys
Indium compounds
Indoor radio communication
Inductance
Inductance measurement
Induction accelerators

```
Induction generators
Induction heating
Induction machines
Induction motor drives
Induction motor protection
Induction motors
Induction (electromagnetic)+ ===> Instead use
     Electromagnetic induction
Induction (electrostatic)+ ===> Instead use
     Electrostatic induction
Inductive energy storage
Inductive transducers+ ===> Instead use
     Magnetic transducers
Inductor alternators
Inductor compensated distribution lines
Inductor compensated transmission lines
Inductors
Industrial control
Industrial electronics
Industrial plants
Industrial power system control
Industrial power system economics
Industrial power system faults
Industrial power system harmonics
Industrial power system maintenance
Industrial power system mechanical factors
Industrial power system planning
Industrial power system protection
Industrial power system reliability
Industrial power system testing
Industrial power system transients
Industrial power systems
Industries
Inertial confinement
Inertial navigation
Infants+ ===> Instead use
     Pediatrics
Inference mechanisms
Infinite duration impulse response digital filters+ ===> Instead use
     IIR digital filters
Information rates
Information retrieval
Information services
Information systems
Information technology
   SN   Use for general aspects only
Information theory
Infrared communication+ ===> Instead use
     Optical communication
Infrared detectors
Infrared heating
Infrared image sensors
Infrared imaging
Infrared lasers+ ===> Instead use
     Lasers
Infrared measurements
Infrared position measurement
```

```
Infrared propagation+ ===> Instead use
     Optical propagation
Infrared radiation effects
Infrared radiometry
Infrared spectroscopy
Infrared surveillance
Infrared tracking
Infrared transducers
Inheritance
Inhomogeneous media+ ===> Instead use
     Nonhomogeneous media
Injected beams+ ===> Instead use
     Particle beam injection
Injection lasers+ ===> Instead use
     Semiconductor lasers
Injection locked amplifiers
Injection locked oscillators
Ink jet printing
Inners
Innovation+ ===> Instead use
     Technological innovation
Input-output stability
Insects+ ===> Instead use
     Animals
Inspection
Instructional aids+ ===> Instead use
     Educational technology
Instrument amplifiers
Instrument landing systems+ ===> Instead use
     Aircraft landing guidance
Instrument transformers
Instrumentation+ ===> Instead use
     Measurement
Instrumentation buses+ ===> Instead use
     Field buses
Insulated gate bipolar transistors
Insulated gate FETs
Insulated gate field effect transistors+ ===> Instead use
     Insulated gate FETs
Insulated gate transistor switches
Insulation
Insulation life
Insulation radiation effects+ ===> Instead use
     Dielectric radiation effects
Insulation testing
Insulation thermal factors
Insulator contamination
Insulator testing
Insulators
Integer programming
Integral equations
Integrated circuit bonding
Integrated circuit design
Integrated circuit doping
Integrated circuit economics
Integrated circuit fabrication
```

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    SN   For commercial manufacture, use "Integrated circuit
manufacture"
Integrated circuit interconnections
Integrated circuit ion implantation
Integrated circuit layout
Integrated circuit manufacture
    SN   For noncommercial processes, use "Integrated circuit
fabrication"
Integrated circuit measurements
Integrated circuit mechanical factors
Integrated circuit metallization
Integrated circuit modeling
Integrated circuit noise
Integrated circuit packaging
Integrated circuit radiation effects
Integrated circuit reliability
Integrated circuit testing
Integrated circuit thermal factors
Integrated circuits
Integrated circuits industry+ ===> Instead use
     Electronics industry
Integrated control+ ===> Instead use
     Centralized control
Integrated injection logic
Integrated optics
Integrated optoelectronics
Integrated services digital networks+ ===> Instead use
     ISDN
Integrated voice-data communication
Integration (mathematics)
Integrators
Integrodifferential equations
Intelligent actuators
Intelligent agent interaction+ ===> Instead use
     Cooperative systems
Intelligent buildings+ ===> Instead use
     Building management systems
Intelligent control
Intelligent databases+ ===> Instead use
     Deductive databases
Intelligent design assistants
Intelligent materials
Intelligent networks
Intelligent robots
Intelligent sensors
Intelligent structures
Intelligent systems
Intelligent tutoring systems
Intensity modulation
Interactive computing
Interactive systems
Interactive TV
Interchannel interference
Interconnected circuits
Interconnected power systems
Interconnected systems
Interconnection networks (multiprocessor)+ ===> Instead use
```

```
     Multiprocessor interconnection
Interconnections
Interdigital transducers
Interface phenomena
Interference
Interference suppression
Interferometry
Interleaved coding
Interleaved memories
Intermediate-frequency amplifiers+ ===> Instead use
     IF amplifiers
Intermediate-frequency systems+ ===> Instead use
     IF systems
Intermodulation distortion
Internal combustion engines
International Electrotechnical Commission+ ===> Instead use
     IEC
International Organization for Standardization+ ===> Instead use
     ISO
International Radio Consultative Committee+ ===> Instead use
     CCIR
International relations
International Telecommunications Union+ ===> Instead use
     ITU
International trade
Internat. Consultative Ctte. for Telephone and Telegraph+ ===> Instead
use
     CCITT
Internet
Internetworking
Interpolation
Interpreters (program)+ ===> Instead use
     Program interpreters
Interrupters
Interrupts
Intersymbol interference
Intrusion detection+ ===> Instead use
     Site security monitoring
Invention+ ===> Instead use
     Technological innovation
Inventory control
Inverse problems
Inversion layers
Inverters
Iodine
Iodine compounds
Ion accelerators
Ion beam applications
Ion beam lithography
Ion beams
Ion emission
Ion engines
Ion implantation
Ion lasers
Ion linear accelerators
Ion optics
Ion radiation effects
```

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Ion sources
Ionization
Ionization chambers
Ionosphere
Ionospheric electromagnetic propagation
Ions
Iridium
Iridium alloys
Iridium compounds
Irises+ ===> Instead use
     Waveguide discontinuities
Iron
Iron alloys
Iron compounds
Irradiation+ ===> Instead use
     Radiation effects
Irreducible realizations+ ===> Instead use
     Minimal realizations
ISDN
ISI+ ===> Instead use
     Intersymbol interference
ISO
Isolation technology
Isolators
Isotope separation
Isotopes
Iterated codes+ ===> Instead use
     Product codes
Iterative logic arrays+ ===> Instead use
     Cellular logic arrays
Iterative methods
ITS+ ===> Instead use
     Intelligent tutoring systems
ITU
I2L+ ===> Instead use
     Integrated injection logic
Jacobian matrices
Jamming
          was used
Japanese characters+ ===> Instead use
     Chinese and Japanese characters
Jet engines
JFET amplifiers
JFET analog integrated circuits
JFET circuits
JFET digital integrated circuits
JFET integrated circuits
JFET logic devices
JFET memory integrated circuits
JFET oscillators
JFET switches
JFETs
Jitter
Josephson amplifiers
Josephson arrays
Josephson device fabrication
   SN   Use for commercial and noncommercial processes
```

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Josephson device measurement applications
Josephson device measurements
Josephson device noise
Josephson device packaging
Josephson device radiation effects
Josephson device reliability
Josephson device testing
Josephson devices
Josephson effect
Josephson junctions
Josephson logic
Josephson memories
Josephson mixers
          was used
Josephson oscillators
Josephson radiation detectors
Josephson switches
Journals
Jump parameter systems
Jump processes
Junction FETs+ ===> Instead use
     JFETs
Junction lasers+ ===> Instead use
     Semiconductor lasers
Junctions (heterojunction)+ ===> Instead use
     Heterojunctions
Junctions (hybrid)+ ===> Instead use
     Hybrid junctions
Junctions (semiconductor)+ ===> Instead use
     Semiconductor junctions
Junctions (waveguide)+ ===> Instead use
     Waveguide junctions
Kalman filtering
Kaons+ ===> Instead use
     Mesons
Karhunen-Loeve transforms
Kbms+ ===> Instead use
     Deductive databases
Kernels (operating systems)+ ===> Instead use
     Operating system kernels
Kerr effect (electrooptic)+ ===> Instead use
     Electrooptic Kerr effect
Kerr effect (magnetooptic)+ ===> Instead use
     Magnetooptic Kerr effect
Kerr effect (optical)+ ===> Instead use
     Optical Kerr effect
Keyboards
Kidneys
Kinematics
Klystrons
Knee joint replacements+ ===> Instead use
     Prosthetics
Knowledge acquisition
Knowledge base management systems+ ===> Instead use
     Deductive databases
Knowledge based systems
Knowledge engineering
```

Knowledge representation
Kohonen networks+ ===> Instead use
     Self-organizing feature maps
Krypton
Laboratories
Ladder circuits
Ladder estimation
Ladder filters
Laguerre processes
Laguerre transforms+ ===> Instead use
     Polynomial transforms
Lakes
Lambda calculus
Lamps
LAN+ ===> Instead use
     Local area networks
LAN interconnection
Land mobile radio
Land mobile radio base stations+ ===> Instead use
     Land mobile radio equipment
Land mobile radio cellular systems
Land mobile radio data communication
Land mobile radio dispatch
Land mobile radio diversity systems
Land mobile radio equipment
Land mobile radio interference
Land mobile radio meteorological factors+ ===> Instead use
     Land mobile radio propagation factors
Land mobile radio propagation factors
Land mobile radio spectrum management
Land mobile radio terrain factors+ ===> Instead use
     Land mobile radio propagation factors
Land transportation
Land vehicles
Landing guidance systems+ ===> Instead use
     Aircraft landing guidance
Languages
Lanthanum
Lanthanum alloys
Lanthanum compounds
Laplace equations
Laplace transforms
Large-scale circuits
Large-scale integration
Large-scale systems
Large-screen displays
Laser ablation
Laser absorbers
Laser accessories
Laser amplifiers
Laser amplitude stability+ ===> Instead use
     Laser stability
Laser annealing
Laser applications
Laser arrays
Laser beam distortion
Laser beam effects+ ===> Instead use

```
      Laser radiation effects
Laser beam fluctuations+ ===> Instead use
      Laser stability
Laser beam focusing
Laser beam steering
Laser beams
Laser biomedical applications
Laser bonding
Laser cavity resonators+ ===> Instead use
      Laser resonators
Laser chemistry applications
Laser components+ ===> Instead use
      Laser accessories
Laser couplers
Laser diodes+ ===> Instead use
      Semiconductor lasers
Laser drivers+ ===> Instead use
      Driver circuits
Laser excitation
Laser frequency stability+ ===> Instead use
      Laser stability
Laser fusion
Laser machining
Laser materials-processing applications
Laser measurement applications
Laser measurements
Laser modes
Laser modulation+ ===> Instead use
      Optical modulation
Laser noise
Laser pulse amplifiers+ ===> Instead use
      Laser amplifiers
Laser radar
Laser radiation effects
Laser reliability
Laser resonators
Laser stability
Laser thermal factors
Laser tuning
Laser wavelength stability+ ===> Instead use
      Laser stability
Laser welding
Lasers
Lattice circuits
Lattice estimation
Lattice filters
Launching (electromagnetic)+ ===> Instead use
      Electromagnetic launching
Launching (electrothermal)+ ===> Instead use
      Electrothermal launching
Law enforcement+ ===> Instead use
      Public safety
Layered media+ ===> Instead use
      Nonhomogeneous media
Layout
Layout of circuit boards+ ===> Instead use
      Printed circuit layout
```

Layout of integrated circuits+ ===> Instead use
     Integrated circuit layout
LCD drivers+ ===> Instead use
     Driver circuits
Lead
Lead alloys
Lead bonding
Lead compounds
Leak detection
Leakage currents
Leaky wave antennas
Leaky waves
Learning automata+ ===> Instead use
     Stochastic automata
Learning control systems
Learning systems
Least mean square methods
Least squares methods
LEDs+ ===> Instead use
     Light-emitting diodes
Legal factors
Legged locomotion
Lempel-Ziv codes
Length measurement
Lens antennas
Lens waveguides
Lenses
Level control
Level measurement
Level-crossing problems
Levitation
Libraries
Lidar+ ===> Instead use
     Laser radar
Lie algebras
Lie groups
Life cycle costing
Life estimation
Light activated switches+ ===> Instead use
     Light triggered switches
Light deflectors
Light sources
Light triggered switches
Light valves
Lighting
Lighting control
Lightning
Light-emitting diode displays
Light-emitting diodes
Limbs
Limit cycles
Limiting
Linacs+ ===> Instead use
     Linear accelerators
Line drivers+ ===> Instead use
     Driver circuits
Line enhancers

```
Line pattern analysis+ ===> Instead use
     Image line pattern analysis
Linear accelerators
Linear algebra
Linear antennas
Linear approximation
Linear arrays
Linear circuits
Linear codes
Linear delay filters
Linear FM+ ===> Instead use
     Chirp modulation
Linear FM radar+ ===> Instead use
     Chirp radar
Linear induction motors
Linear integrated circuits+ ===> Instead use
     Analog integrated circuits
Linear magnitude filters
Linear motors
Linear phase filters
Linear predictive coding
Linear programming
Linear synchronous motors
Linear systems
Linear systems (algebraic)+ ===> Instead use
     Linear algebra
Linear-quadratic control
Linear-quadratic-Gaussian control
Liquid crystal devices
Liquid crystal displays
Liquid crystals
Liquid flow+ ===> Instead use
     Fluid flow
Liquid helium
Liquid insulation+ ===> Instead use
     Dielectric liquids
Liquid lasers
Liquid leak detection
Liquid level control+ ===> Instead use
     Level control
Liquid level measurement+ ===> Instead use
     Level measurement
Liquids
LISP
List processing
Lithium
Lithium alloys
Lithium compounds
Lithography
Liver
Livestock+ ===> Instead use
     Agriculture
LMS+ ===> Instead use
     Least mean square methods
Load dispatching+ ===> Instead use
     Power generation dispatch
Load flow analysis
```

```
Load flow control
Load forecasting
Load frequency control+ ===> Instead use
     Power generation control
Load leveling+ ===> Instead use
     Power generation peaking capacity
Load management
Load modeling
Load restoration
Load shedding
Loaded antennas
Loaded scatterers
Loaded waveguides
Local area networks
Locked amplifiers
Locked oscillators
Locomotion (legged)+ ===> Instead use
     Legged locomotion
Log normal distributions
Log periodic antennas
Log spiral antennas
Logarithmic amplifiers
Logarithmic arithmetic
Logic
Logic arrays
Logic circuit design+ ===> Instead use
     Logic design
Logic circuit fault diagnosis
Logic circuit fault tolerance
Logic circuit testing
Logic circuits
Logic design
Logic devices
Logic functions
Logic inverters+ ===> Instead use
     Pulse inverters
Logic modules
Logic partitioning
Logic programming
Logic programming languages
Logistics
Loop antenna arrays
Loop antennas
Loosely coupled multiprocessors+ ===> Instead use
     Distributed memory systems
Loran
Loss measurement
Losses
Lossless circuits
Lossy circuits
Lossy media+ ===> Instead use
     Absorbing media
Lossy systems
Loudspeakers
Low-pass filters
LPC+ ===> Instead use
     Linear predictive coding
```

```
LQ control+ ===> Instead use
     Linear-quadratic control
LQG control+ ===> Instead use
     Linear-quadratic-Gaussian control
LSI+ ===> Instead use
     Large-scale integration
Lubrication
Luminescence
Luminescent devices
Lumped element microwave circuits
Lungs+ ===> Instead use
     Respiratory system
Lutetium
Lutetium alloys
Lutetium compounds
Lyapunov matrix equations
Lyapunov methods
Machine tool control
Machine tools
Machine vision
Machine windings
Machining
Magnesium
Magnesium alloys
Magnesium compounds
Magnet wire
Magnetic amplifiers
Magnetic analysis
Magnetic anisotropy
Magnetic bearings+ ===> Instead use
     Magnetic levitation
Magnetic bubble devices
Magnetic bubble domains
Magnetic bubble memories
Magnetic circuits
Magnetic confinement
Magnetic core losses+ ===> Instead use
     Magnetic losses
Magnetic core memories
Magnetic cores
Magnetic devices
Magnetic disk recording
Magnetic domains
Magnetic energy storage+ ===> Instead use
     Inductive energy storage
Magnetic field effects
Magnetic field measurement
Magnetic fields
Magnetic film memories
Magnetic films
Magnetic filters+ ===> Instead use
     Magnetic separation
Magnetic fluids+ ===> Instead use
     Magnetic liquids
Magnetic flux measurement+ ===> Instead use
     Magnetic field measurement
Magnetic force microscopy
```

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Magnetic forces
Magnetic glasses+ ===> Instead use
     Amorphous magnetic materials
Magnetic heads
Magnetic hysteresis
Magnetic insulation
Magnetic layered films
Magnetic levitation
Magnetic liquids
Magnetic logic devices
Magnetic losses
Magnetic material loaded waveguides
Magnetic materials
Magnetic measurements+ ===> Instead use
     Magnetic variables measurement
Magnetic memories
Magnetic microwave devices
Magnetic millimeter wave devices
Magnetic modulators
Magnetic noise
Magnetic recording
Magnetic recording mechanical factors
Magnetic recording noise
Magnetic resonance
Magnetic resonance angiocardiography
Magnetic resonance cardiography
Magnetic resonance imaging
Magnetic resonance spectroscopy
Magnetic semiconductors
Magnetic separation
Magnetic shielding
Magnetic storms
Magnetic susceptibility
Magnetic switches
Magnetic tape recording
Magnetic tapes
Magnetic thermal factors
Magnetic transducers
Magnetic variables control
Magnetic variables measurement
Magnetization processes
Magnetization reversal
Magnetoacoustic effects
Magnetocardiography
Magnetoelasticity
Magnetoelectric effects
Magnetoencephalography
Magnetohydrodynamic conversion
Magnetohydrodynamics
Magnetomechanical effects
Magnetometers
Magnetooptic devices
Magnetooptic effects
Magnetooptic films
Magnetooptic isolators
Magnetooptic Kerr effect
Magnetooptic memories
```

Magnetooptic modulation
Magnetooptic readout heads
Magnetooptic recording
Magnetooptic transducers
Magnetoresistance
Magnetoresistive devices
Magnetoresistivity+ ===> Instead use
     Magnetoresistance
Magnetoresistors+ ===> Instead use
     Magnetoresistive devices
Magnetosphere
Magnetostatic surface waves
Magnetostatic volume waves
Magnetostatic waves
Magnetostatics
Magnetostriction
Magnetostrictive devices
Magnetrons
Magnets
Mail+ ===> Instead use
     Postal services
Mail (electronic)+ ===> Instead use
     Electronic mail
Maintenance
Majority logic circuits
Majority logic decoding
Majority logic devices
Majority logic functions
Management
Management decision-making
Management education
Management information systems
Manganese
Manganese alloys
Manganese compounds
Manipulator collision detection+ ===> Instead use
     Manipulator motion-planning
Manipulator dynamics
Manipulator kinematics
Manipulator motion-planning
Manipulator obstacle avoidance+ ===> Instead use
     Manipulator motion-planning
Manipulator sensing systems+ ===> Instead use
     Robot sensing systems
Manipulator tactile systems+ ===> Instead use
     Robot tactile systems
Manipulator vision systems+ ===> Instead use
     Robot vision systems
Manipulators
Manipulators (nonrobotic)+ ===> Instead use
     Remote handling
Manuals
Manufacturing
   SN   Use for commercial manufacture only
   SN   For noncommercial processes, use "Fabrication"
Manufacturing automation
Manufacturing automation software

Manufacturing data processing
Manufacturing economics
Manufacturing management+ ===> Instead use
     Production management
Manufacturing planning
Manufacturing scheduling
Manufacturing testing
Many valued logic+ ===> Instead use
     Multivalued logic
Man-machine interfaces+ ===> Instead use
     User interfaces
Man-machine systems
MAP estimation
Mapping (terrain)+ ===> Instead use
     Terrain mapping
Mapping (vegetation)+ ===> Instead use
     Vegetation mapping
Marine animals
Marine cables (communication)+ ===> Instead use
     Underwater communication cables
Marine cables (mechanical)+ ===> Instead use
     Mechanical cables
Marine cables (power)+ ===> Instead use
     Underwater power cables
Marine electrical equipment
Marine electronic equipment
Marine equipment
Marine ports and harbors
Marine radar
Marine structures
Marine technology
Marine telemetry
Marine traffic control
Marine transportation
Marine vegetation
Marine vehicle communication
Marine vehicle control
Marine vehicle detection and tracking
Marine vehicle electrical systems+ ===> Instead use
     Marine vehicle power systems
Marine vehicle electronics
Marine vehicle maintenance
Marine vehicle power systems
Marine vehicle propulsion
Marine vehicle reliability
Marine vehicle testing
Marine vehicle tracking+ ===> Instead use
     Marine vehicle detection and tracking
Marine vehicles
Marketing
Markov processes
Martingales
Marx generators
Masers
Masks
Mass memories
Mass spectroscopy

Matched filters
Materials handling
Materials processing
Materials reliability
Materials science and technology
Materials testing
Mathematical morphology+ ===> Instead use
      Morphological operations
Mathematical programming
Mathematics
Matrices
Matrix decomposition
Matrix factorization+ ===> Instead use
      Matrix decomposition
Matrix inversion
Matrix multiplication
Maximally flat delay filters+ ===> Instead use
      Linear phase filters
Maximally flat magnitude filters
Maximum a posteriori estimation+ ===> Instead use
      MAP estimation
Maximum entropy methods
Maximum likelihood decoding
Maximum likelihood detection
Maximum likelihood estimation
Maximum principle
Maxwell equations
MCG+ ===> Instead use
      Magnetocardiography
MCM+ ===> Instead use
      Multichip modules
Mean square error methods
Measurement
Measurement errors
Measurement feedback+ ===> Instead use
      State feedback
Measurement standards
Measurement system data handling
Measurement units
Mechanical cables
Mechanical control equipment
Mechanical energy storage
Mechanical engineering
Mechanical factors
Mechanical systems
Mechanical variables control
Mechanical variables measurement
Mechatronics
Median filters
Medical decision-making
Medical diagnosis
Medical economics
Medical expert systems
Medical facilities+ ===> Instead use
      Medical services
Medical image processing+ ===> Instead use
      Biomedical image processing

Medical imaging+ ===> Instead use
     Biomedical imaging
Medical information systems
Medical services
Medical services planning
Medical treatment
Meetings
MEG+ ===> Instead use
     Magnetoencephalography
Membranes
Memories
Memory access+ ===> Instead use
     Memory management
Memory allocation+ ===> Instead use
     Memory management
Memory architecture
Memory fault diagnosis
Memory fault tolerance
Memory hierarchies+ ===> Instead use
     Memory architecture
Memory management
Memory protocols
Memory scheduling+ ===> Instead use
     Memory management
Memory testing
Memory transfers+ ===> Instead use
     Memory management
Memoryless systems
Mental models+ ===> Instead use
     Cognitive science
Mercury alloys
Mercury compounds
Mercury (metal)
Merged transistor logic+ ===> Instead use
     Integrated injection logic
Merging
Mersenne transforms+ ===> Instead use
     Number theoretic transforms
MESFET amplifiers
MESFET circuits
MESFET integrated circuits
MESFET logic devices
MESFET memory integrated circuits
MESFET oscillators
MESFET power amplifiers
MESFET switches
MESFETs
Mesh generation
Meson beams
Meson detectors
Meson facilities
Meson radiation effects
Mesons
Message passing
Message switching
Message systems
Metabolism+ ===> Instead use

Biochemistry
Metal vapor lasers+ ===> Instead use
     Gas lasers
Metallic glasses+ ===> Instead use
     Amorphous magnetic materials
Metallic superlattices+ ===> Instead use
     Superlattices
Metallization
Metals
Metals industry
Metal-insulator structures
Metal-insulator-metal devices+ ===> Instead use
     MIM devices
Metal-insulator-oxide-semiconductor devices+ ===> Instead use
     MIS devices
Metal-insulator-semiconductor devices+ ===> Instead use
     MIS devices
Metal-insulator-semiconductor-metal devices+ ===> Instead use
     MISM devices
Metal-nitride-oxide-semiconductor devices+ ===> Instead use
     MIS devices
Metal-nitride-semiconductor devices+ ===> Instead use
     MIS devices
Metal-oxide-semiconductor devices+ ===> Instead use
     MOS devices
Metal-semiconductor interfaces+ ===> Instead use
     Semiconductor-metal interfaces
Metal-semiconductor-metal devices+ ===> Instead use
     MSM devices
Meteor burst communication
Meteorological radar
Meteorology
Metropolitan area networks
MHD+ ===> Instead use
     Magnetohydrodynamics
MIC+ ===> Instead use
     Microwave integrated circuits
Mica insulation
Microactuators
Microassembly
Microcomputer applications
Microcomputers
Microcontrollers
Microelectrodes
Microelectromechanical devices
Micromachining
Micromotors
Microorganisms
Microphones
Microprocessor applications
Microprocessor testing
Microprocessors
Microprogramming
Micropumps
Microresonators
Microscopy
Microsensors

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Microstrip
Microstrip antennas
Microstrip arrays
Microstrip circuits
Microstrip components
Microstrip couplers
Microstrip directional couplers
Microstrip discontinuities
Microstrip filters
Microstrip resonators
Microstrip transitions
Microtrons
Microwave amplifiers
Microwave antenna arrays
Microwave antennas
Microwave attenuators
Microwave bipolar integrated circuits
Microwave bipolar transistor amplifiers
Microwave bipolar transistor oscillators
Microwave bipolar transistors
Microwave circuits
Microwave circulators
Microwave communication
Microwave detectors
Microwave devices
Microwave diodes
Microwave FET amplifiers
Microwave FET integrated circuits
Microwave FET oscillators
Microwave FETs
Microwave filters
Microwave frequency conversion
Microwave generation
Microwave heating+ ===> Instead use
     Electromagnetic heating
Microwave holography
Microwave imaging
Microwave integrated circuits
Microwave isolators
Microwave landing systems+ ===> Instead use
     Aircraft landing guidance
Microwave lasers+ ===> Instead use
     Masers
Microwave limiters
Microwave magnetic devices+ ===> Instead use
     Magnetic microwave devices
Microwave measurements
Microwave mixers
Microwave modulation
Microwave oscillators
Microwave phase shifters
Microwave power amplifiers
Microwave power bipolar transistor amplifiers
Microwave power bipolar transistors
Microwave power FET amplifiers
Microwave power FETs
Microwave power transmission
```

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Microwave propagation
Microwave radar+ ===> Instead use
      Radar
Microwave radiation effects+ ===> Instead use
      Electromagnetic radiation effects
Microwave radio communication
Microwave radio propagation
Microwave radio propagation meteorological factors
Microwave radio propagation terrain factors
Microwave radiometry
Microwave receivers
Microwave reflectometry
Microwave repeaters
Microwave resonators
Microwave spectroscopy
Microwave switches
Microwave technology
Microwave transistors
Microwave transmitters
Microwave tubes
Microwave waveguides+ ===> Instead use
      Waveguides
MIL standards+ ===> Instead use
      Military standards
Military aircraft
Military command and control+ ===> Instead use
      Command and control systems
Military communication
Military computing
Military data processing
Military decision-making
Military economics
Military equipment
Military information systems
Military land vehicles
Military procurement
Military satellites
Military standards
Millimeter wave amplifiers
Millimeter wave antenna arrays
Millimeter wave antennas
Millimeter wave attenuators
Millimeter wave bipolar integrated circuits
Millimeter wave bipolar transistor amplifiers
Millimeter wave bipolar transistor oscillators
Millimeter wave bipolar transistors
Millimeter wave circuits
Millimeter wave circulators
Millimeter wave communication
Millimeter wave couplers
Millimeter wave detectors
Millimeter wave devices
Millimeter wave diodes
Millimeter wave directional couplers
Millimeter wave FET amplifiers
Millimeter wave FET integrated circuits
Millimeter wave FET oscillators
```

```
Millimeter wave FETs
Millimeter wave filters
Millimeter wave frequency conversion
Millimeter wave generation
Millimeter wave imaging
Millimeter wave integrated circuits
Millimeter wave isolators
Millimeter wave lasers
Millimeter wave magnetic devices+ ===> Instead use
     Magnetic millimeter wave devices
Millimeter wave measurements
Millimeter wave mixers
Millimeter wave modulation
Millimeter wave monolithic integrated circuits+ ===> Instead use
     MIMICs
Millimeter wave oscillators
Millimeter wave phase shifters
Millimeter wave power amplifiers
Millimeter wave power bipolar transistor amplifiers
Millimeter wave power bipolar transistors
Millimeter wave power FET amplifiers
Millimeter wave power FETs
Millimeter wave propagation
Millimeter wave radar
Millimeter wave radiation effects+ ===> Instead use
     Electromagnetic radiation effects
Millimeter wave radio communication
Millimeter wave radio propagation
Millimeter wave radio propagation meteorological factors
Millimeter wave radio propagation terrain factors
Millimeter wave radiometry
Millimeter wave receivers
Millimeter wave repeaters
Millimeter wave resonators
Millimeter wave spectroscopy
Millimeter wave switches
Millimeter wave technology
Millimeter wave transistors
Millimeter wave transmitters
Millimeter wave tubes
Millimeter wave waveguides
MIM devices
MIMICs
MIMO systems
MIN+ ===> Instead use
     Multistage interconnection networks
Minicomputer applications
Minicomputers
Minimal realizations
Minimax control
Minimax methods
Minimization methods
Minimum effort control
Minimum energy control
Minimum entropy methods
Minimum fuel control+ ===> Instead use
     Fuel optimal control
```

Minimum mean square error methods+ ===> Instead use
     Least mean square methods
Minimum shift keying
Mining industry
Mining industry safety
MIOS devices+ ===> Instead use
     MIS devices
Mirrors
MIS capacitors
MIS devices
MISFETs
MISM devices
Missile control
Missile detection and tracking
Missile guidance
Missile propulsion
Missile tracking+ ===> Instead use
     Missile detection and tracking
Missiles
Mixed analog-digital integrated circuits
Mixer noise
Mixers
MLS+ ===> Instead use
     Aircraft landing guidance
MMIC amplifiers
MMIC frequency converters
MMIC mixers
MMIC oscillators
MMIC phase shifters
MMIC power amplifiers
MMIC receivers
MMIC repeaters
MMIC switches
MMIC transmitters
MMICs
MMSE+ ===> Instead use
     Least mean square methods
MNOS devices+ ===> Instead use
     MIS devices
MNS devices+ ===> Instead use
     MIS devices
Mobile antennas
Mobile communication
Mobile office+ ===> Instead use
     Teleworking
Mobile power supplies
Mobile robot collision detection+ ===> Instead use
     Mobile robot motion-planning
Mobile robot dynamics
Mobile robot kinematics
Mobile robot motion-planning
Mobile robot navigation+ ===> Instead use
     Mobile robot motion-planning
Mobile robot obstacle avoidance+ ===> Instead use
     Mobile robot motion-planning
Mobile robot sensing systems+ ===> Instead use
     Robot sensing systems

Mobile robot tactile systems+ ===> Instead use
     Robot tactile systems
Mobile robot vision systems+ ===> Instead use
     Robot vision systems
Mobile robots
Mode coupling+ ===> Instead use
     Coupled mode analysis
Mode locked lasers
Mode matching methods
Model reduction+ ===> Instead use
     Reduced order systems
Model reference adaptive control
Modeling
Modems
MODFET amplifiers
MODFET circuits
MODFET integrated circuits
MODFET logic devices
MODFET memory integrated circuits
MODFET oscillators
MODFET power amplifiers
MODFET switches
MODFETs
Modular computer systems
Modulation
Modulation coding
Modulation transfer functions+ ===> Instead use
     Optical transfer functions
Modulators+ ===> Instead use
     Modulation
Modulator-demodulators+ ===> Instead use
     Modems
Moisture
Moisture control
Moisture measurement
Moisture transducers
Molecular electronics
Molecular lasers+ ===> Instead use
     Gas lasers
Molybdenum
Molybdenum alloys
Molybdenum compounds
MOM devices+ ===> Instead use
     MIM devices
Moment methods
Monitoring
Monolithic integrated circuits
Monolithic microwave integrated circuits+ ===> Instead use
     MMICs
Monopole antennas
Monopole arrays
Monopulse antennas
Monopulse radar
Monte Carlo methods
Moon
Morphological filters+ ===> Instead use
     Morphological operations

Morphological operations
MOS analog integrated circuits
MOS capacitors
MOS controlled thyristors
MOS devices
MOS digital integrated circuits
MOS integrated circuits
MOS memory integrated circuits
MOS transistors+ ===> Instead use
     MOSFETs
MOSFET amplifiers
MOSFET circuits
MOSFET logic devices
MOSFET oscillators
MOSFET power amplifiers
MOSFET switches
MOSFETs
Mossbauer spectroscopy
Motion analysis
Motion compensation
Motion control
Motion measurement
Motion pictures
Motion-planning
Motor control+ ===> Instead use
     Motor drives
Motor drives
Motor economics
Motor protection
Motor speed control+ ===> Instead use
     Motor drives
Motor systems (biological)+ ===> Instead use
     Biological motor systems
Motors
Moving average processes
Moving target indicators+ ===> Instead use
     Pulse Doppler radar
MRI+ ===> Instead use
     Magnetic resonance imaging
MSK+ ===> Instead use
     Minimum shift keying
MSM devices
MTF+ ===> Instead use
     Optical transfer functions
MTI radar+ ===> Instead use
     Pulse Doppler radar
MTL+ ===> Instead use
     Integrated injection logic
Mud+ ===> Instead use
     Sediments
Multiaccess communication
Multiarea power systems+ ===> Instead use
     Interconnected power systems
Multibeam antennas
Multicast channels
Multichannel analyzers+ ===> Instead use
     Pulse height analyzers

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Multichip modules
Multiconductor transmission lines
Multidimensional coding
Multidimensional digital filter stability+ ===> Instead use
     Digital filter wordlength effects
Multidimensional digital filters
Multidimensional sequences
Multidimensional signal detection
Multidimensional signal processing
Multidimensional systems
Multifrequency antennas
Multilayer perceptrons
Multilayers+ ===> Instead use
     Nonhomogeneous media
Multilevel systems
Multilinear systems+ ===> Instead use
     Nonlinear systems
Multimanipulator systems+ ===> Instead use
     Multiple manipulators
Multimedia communication
Multimedia computing
Multimedia databases
Multimedia systems
Multimode transmission lines
Multimode waveguides
Multipath channels
Multiple-input multiple-output systems+ ===> Instead use
     MIMO systems
Multiple manipulators
Multiplexing
Multiple-input multiple-output systems+ ===> Instead use
     MIMO systems
Multiplication
Multiplying circuits
Multiport circuits
Multiprocessing
Multiprocessor interconnection
Multiprocessor scheduling+ ===> Instead use
     Processor scheduling
Multiprogramming
Multireflector antennas
Multisensor systems
Multistage interconnection networks
Multistatic scattering
Multitasking
Multiuser channels
Multivalued logic
Multivalued logic circuits
Multivalued logic devices
Multivariable circuits
Multivariable functions
Multivariable systems
Multivibrators
Muons+ ===> Instead use
     Mesons
Muscles
Music
```

Mutual coupling
Nanotechnology
Natural gas
Natural gas industry
Natural language interfaces
Natural languages
Navigation
Negative immittance converters+ ===> Instead use
     Immittance converters
Negative immittance inverters+ ===> Instead use
     Immittance inverters
Negative resistance circuits
Negative resistance devices
Neodymium
Neodymium alloys
Neodymium compounds
Neodymium:glass lasers
Neodymium:solid lasers
Neodymium:YAG lasers
Neon
Neonates+ ===> Instead use
     Obstetrics
Nervous system
Nets+ ===> Instead use
     Networks
Network fault diagnosis
Network fault tolerance
Network interfaces
          interfaces" was used
Network operating systems
Network reliability
Network routing+ ===> Instead use
     Routing
Network servers
Network testing
Networks
Neural chips+ ===> Instead use
     Neural network hardware
Neural network applications
Neural network architecture
Neural network hardware
Neural networks
Neurocontrollers
Neurology+ ===> Instead use
     Nervous system
Neuromuscular stimulation
Neutrinos
Neutron activation analysis
Neutron beams
Neutron detectors
Neutron radiation effects
Neutron sources
Neutron spectroscopy
Neutron spectroscopy detectors
Neutrons
Newton method
Newton-Raphson method

Nickel
Nickel alloys
Nickel compounds
Niobium
Niobium alloys
Niobium compounds
Nitrogen
Nitrogen compounds
NMR+ ===> Instead use
     Nuclear magnetic resonance
NMR imaging+ ===> Instead use
     Magnetic resonance imaging
NMR spectroscopy+ ===> Instead use
     Magnetic resonance spectroscopy
Noble gases
Noise
Noise generators
Noise measurement
Nondestructive readout
Nondestructive testing
Nonhomogeneous media
Nonhomogeneously loaded waveguides
Nonlinear acoustics
Nonlinear circuits
Nonlinear detection
Nonlinear difference equations
Nonlinear differential equations
Nonlinear distortion
Nonlinear equations
Nonlinear estimation
Nonlinear filters
Nonlinear functions
Nonlinear magnetics
Nonlinear media
Nonlinear optics
Nonlinear oscillators
Nonlinear programming
Nonlinear systems
Nonlinear wave propagation
Nonlinearities
Nonmonotonic reasoning
Nonradiative dielectric waveguides
Nonreciprocal circuits
Nonreciprocal media
Nonreciprocal wave propagation
Nonuniform transmission lines+ ===> Instead use
     Distributed parameter circuits
Nonuniformly spaced arrays
Normal distributions
Notch filters
NRD waveguides+ ===> Instead use
     Nonradiative dielectric waveguides
Nuclear angiocardiography
Nuclear cardiography
Nuclear chest imaging
Nuclear explosions
Nuclear fuels

Nuclear imaging
Nuclear magnetic resonance
Nuclear magnetic resonance imaging+ ===> Instead use
      Magnetic resonance imaging
Nuclear measurements
Nuclear medicine+ ===> Instead use
      Biomedical applications of nuclear radiation
Nuclear physics
Nuclear power generation
Nuclear power generation auxiliary systems
Nuclear power generation control
Nuclear power generation maintenance
Nuclear power generation reliability
Nuclear power generation safety
Nuclear radiation effects
Nuclear reactors (fission)+ ===> Instead use
      Fission reactors
Nuclear reactors (fusion)+ ===> Instead use
      Fusion reactors
Nuclear rocket engines
Nuclear tomography
Nuclear wastes+ ===> Instead use
      Radioactive pollution
Number theoretic transforms
Number theory
Numerical analysis
Numerical control
Numerical stability
Nursing+ ===> Instead use
      Medical services
Nyquist stability
N-path circuits
N-path filters
N-port circuits+ ===> Instead use
      Multiport circuits
Obituaries
Object detection
Object oriented databases
Object oriented languages
Object oriented methods
Object oriented programming
Object recognition
Observability
Observers
Obstetrics
Occupational health and safety
Ocean+ ===> Instead use
      Sea
Ocean animals+ ===> Instead use
      Marine animals
Ocean technology+ ===> Instead use
      Marine technology
Ocean thermal energy conversion
Ocean vegetation+ ===> Instead use
      Marine vegetation
OCR+ ===> Instead use
      Optical character recognition

Octrees
Office automation
Offset reflector antennas
Ogives
Ohmic contacts
Ohmmeters+ ===> Instead use
     Resistance measurement
Oil+ ===> Instead use
     Petroleum
Oil circuit breakers
Oil filled cables
Oil industry+ ===> Instead use
     Petroleum industry
Oil insulation
Olfactory system
One-port circuits
On-off control
On-off keying+ ===> Instead use
     Amplitude shift keying
OOK+ ===> Instead use
     Amplitude shift keying
Open systems
Operating system kernels
Operating systems
Operational amplifiers
Operations research
Operators (mathematics)
Ophthalmic lenses
Optical altimetry
Optical amplifiers
Optical arrays
Optical beam focusing
Optical beam splitting
Optical beams
Optical bistability
Optical character recognition
Optical circulators
Optical communication
Optical communication equipment
Optical communication terminals
Optical components
Optical computing
Optical control
Optical correlators
Optical couplers
   SN   Use for physical device only
Optical coupling
   SN   For physical device, use "Optical couplers"
Optical crosstalk
Optical data processing
Optical deflectors+ ===> Instead use
     Light deflectors
Optical delay lines
Optical detectors+ ===> Instead use
     Photodetectors
Optical device fabrication
   SN   Use for commercial and noncommercial processes

```
Optical diffraction
Optical directional couplers
Optical distance measurement
Optical distortion
Optical ellipsometry+ ===> Instead use
     Ellipsometry
Optical equalizers
Optical feedback
Optical fiber amplifiers
Optical fiber applications
Optical fiber cables
Optical fiber cladding
Optical fiber communication
Optical fiber connecting
Optical fiber couplers
   SN   Use for physical device only
Optical fiber coupling
   SN   For physical device, use "Optical fiber couplers"
Optical fiber delay lines
Optical fiber device fabrication+ ===> Instead use
     Optical device fabrication
Optical fiber devices
Optical fiber dispersion
Optical fiber fabrication
   SN   Use for commercial and noncommercial processes
Optical fiber filters
Optical fiber interference
Optical fiber LAN
Optical fiber lasers
Optical fiber losses
Optical fiber materials
Optical fiber measurement applications
Optical fiber measurements
Optical fiber mechanical factors
Optical fiber polarization
Optical fiber protective covering
Optical fiber radiation effects
Optical fiber switches
Optical fiber telemetry
Optical fiber testing
Optical fiber theory
Optical fiber thermal factors
Optical fiber transducers
Optical fiber transitions
Optical fibers
Optical films
Optical filters
Optical frequency conversion
Optical glass
          materials/devices" were used
Optical gratings+ ===> Instead use
     Gratings
Optical hole burning
Optical image processing
Optical imaging
Optical imaging (biological)+ ===> Instead use
     Visual system
```

```
Optical interconnections
Optical interferometry
Optical isolators
Optical Kerr effect
Optical klystrons
Optical limiters
Optical links+ ===> Instead use
     Optical communication
Optical logic devices
Optical losses
Optical materials
Optical measurements+ ===> Instead use
     Optical variables measurement
Optical memories
Optical mixers
   SN   Use for physical device only
Optical mixing
   SN   For physical device, use "Optical mixers"
Optical modulation
Optical neural networks
Optical noise
Optical oscillators
Optical parametric amplifiers
Optical parametric oscillators
Optical phase conjugation
Optical phase locked loops
Optical phase matching
Optical phase shifters
Optical planar waveguide components
Optical planar waveguide couplers
Optical planar waveguides
Optical polarization
Optical polymers
Optical position measurement
Optical propagation
Optical propagation in absorbing media
Optical propagation in anisotropic media
Optical propagation in dispersive media
Optical propagation in nonhomogeneous media
Optical propagation in nonlinear media
Optical propagation in nonreciprocal media+ ===> Instead use
     Nonreciprocal wave propagation
Optical propagation in plasma media
Optical pulse amplifiers
Optical pulse compression
Optical pulse generation
Optical pulse measurements
Optical pulse shaping
Optical pulses
Optical pumping
Optical radar+ ===> Instead use
     Laser radar
Optical radiation effects
Optical radiometry+ ===> Instead use
     Radiometry
Optical receivers
Optical recording
```

```
Optical reflection
Optical refraction
Optical repeaters
Optical resonance
Optical resonators
Optical saturation
Optical scattering
Optical self-focusing
Optical signal detection
Optical signal processing
Optical solitons
Optical spectroscopy
Optical strip waveguide components
Optical strip waveguide couplers
Optical strip waveguides
Optical subscriber loops
Optical subscriber sets+ ===> Instead use
     Optical communication terminals
Optical surface waves
Optical switches
Optical taps+ ===> Instead use
     Optical couplers
Optical time domain reflectometry
Optical tomography
          imaging/mapping" were used
Optical tracking
Optical transducers
Optical transfer functions
Optical transient propagation
Optical transient scattering
Optical transmitters
Optical variables control
Optical variables measurement
Optical velocity measurement
   SN   Use for velocity measurement by optical means
   SN   For optical wave velocity, use "Optical propagation"
Optical waveguide components
Optical waveguide filters
Optical waveguide theory
Optical waveguides
Optics
Optimal control
Optimization methods
Optimizing compilers
Optoacoustic effects+ ===> Instead use
     Photoacoustic effects
Optoelectronic devices
Optothermal effects+ ===> Instead use
     Photothermal effects
Optothyristors+ ===> Instead use
     Photothyristors
Oral communication
Order statistic filters+ ===> Instead use
     Nonlinear filters
Organic compounds
Organic dyes+ ===> Instead use
     Dyes
```

```
Organs (biological)+ ===> Instead use
     Biological organs
Orientation control+ ===> Instead use
     Position control
Orientation determination+ ===> Instead use
     Position measurement
Orientation determination (image)+ ===> Instead use
     Image orientation analysis
Orientation measurement+ ===> Instead use
     Position measurement
Orthogonal functions
Orthogonal transforms+ ===> Instead use
     Transforms
Orthopedics
Orthotics
Oscillator noise
Oscillator stability
Oscillators
Oscillography
Oscilloscopes
OSI+ ===> Instead use
     Open systems
OTDR+ ===> Instead use
     Optical time domain reflectometry
OTEC+ ===> Instead use
     Ocean thermal energy conversion
OTF+ ===> Instead use
     Optical transfer functions
Output feedback
Overcurrent protection
Overflow oscillations+ ===> Instead use
     Finite wordlength effects
Overhead distribution lines+ ===> Instead use
     Power distribution lines
Overhead transmission lines+ ===> Instead use
     Power transmission lines
Overvoltage protection
Overwater radio propagation
Oxidation
Oxygen
Oxygen compounds
Oxygenators+ ===> Instead use
     Blood oxygenators
Ozone
Pacemakers+ ===> Instead use
     Cardiac pacemakers
Packaging
Packet radio
Packet reservation multiaccess
Packet switching
PACS+ ===> Instead use
     Picture archiving and communication systems
Page description languages
          languages" were used
Paged memories
Paging communication
Pain
```

```
Palladium
Palladium alloys
Palladium compounds
PAM+ ===> Instead use
     Pulse amplitude modulation
Pancreas+ ===> Instead use
     Digestive system
Paper industry+ ===> Instead use
     Pulp and paper industry
Paper insulation
Paraelectric materials+ ===> Instead use
     Dielectric materials
Parallel algorithms
Parallel architectures
Parallel languages
Parallel machines
Parallel memories
Parallel plate waveguides
Parallel processing
Parallel processor interconnection+ ===> Instead use
     Multiprocessor interconnection
Parallel programming
Parallelizing compilers
Paramagnetic materials
Paramagnetic resonance
Parameter estimation
Parameter identification+ ===> Instead use
     Parameter estimation
Parameter space methods
Parameter uncertainty+ ===> Instead use
     Uncertain systems
Parametric amplifiers
Parametric devices
Parametric oscillators
Parasitic antennas
Pareto distributions
Parity check+ ===> Instead use
     Codes
Partial differential equations
Partial discharges
Partial fraction expansions
Partial response signaling
Particle accelerators+ ===> Instead use
     Accelerators
Particle beam bunching
Particle beam choppers
Particle beam control
Particle beam cooling
Particle beam debunching+ ===> Instead use
     Particle beam bunching
Particle beam dynamics
Particle beam extraction
Particle beam focusing
Particle beam handling
Particle beam injection
Particle beam measurements
Particle beam optics
```

Particle beam stability
Particle beam steering
Particle beam transport
Particle beams
Particle charging
Particle collisions
Particle detectors+ ===> Instead use
     Radiation detectors
Particle measurements
Particle production
Particle scattering
Particle separators
Particle sources
Particle spectroscopy+ ===> Instead use
     Spectroscopy
Particle tracking
Particles (elementary)+ ===> Instead use
     Elementary particles
Particulate measurements+ ===> Instead use
     Particle measurements
Passivation
Passive circuits
Passive filters
Patch antennas+ ===> Instead use
     Microstrip antennas
Patent abstracts
Patents
Pattern classification
Pattern clustering methods
Pattern matching
Pattern recognition
Pattern recognition equipment
PCB+ ===> Instead use
     Polychlorinated biphenyls
PCM+ ===> Instead use
     Pulse code modulation
PDM+ ===> Instead use
     Pulse width modulation
Peak detectors
Pediatrics
Peltier effect+ ===> Instead use
     Thermoelectricity
Perceptrons
Periodic control
Periodic functions
Periodic media+ ===> Instead use
     Nonhomogeneous media
Periodic structures
Peripheral equipment+ ===> Instead use
     Computer peripherals
Permalloy
Permalloy films
Permanent magnet generators
Permanent magnet machines
Permanent magnet motors
Permanent magnets
Permeability

Permeability measurement
Permeable base transistors
Permittivity
Permittivity measurement
Permutation codes
Permutation matrices
Permutations
Perpendicular magnetic anisotropy
Perpendicular magnetic recording
Personal communication networks
Personal computers+ ===> Instead use
     Microcomputers
Personnel
Personnel monitoring+ ===> Instead use
     Radiation monitoring
Perturbation methods
PET+ ===> Instead use
     Positron emission tomography
Petri nets
Petroleum
Petroleum industry
PFM+ ===> Instead use
     Pulse frequency modulation
Pharmaceuticals+ ===> Instead use
     Drugs
Phase coding
Phase comparators
Phase conjugation
Phase control
Phase conversion
Phase detection
Phase distortion
Phase equalizers
Phase estimation
Phase jitter
Phase locked amplifiers
Phase locked loops
Phase locked oscillators
Phase matching
Phase measurement
Phase modulation
Phase noise
Phase shift keying
Phase shifters
Phase synchronization
Phase transformers
Phased array radar
Phased arrays
Philosophical considerations
Phonographs+ ===> Instead use
     Audio systems
Phonons
Phosphorus
Phosphorus alloys
Phosphorus compounds
Photoacoustic effects
Photoacoustic spectroscopy

Photocathodes
Photochromism
Photocomposition+ ===> Instead use
     Text processing
Photoconducting devices
Photoconducting materials
Photoconductivity
Photoconductors+ ===> Instead use
     Photoconducting materials
Photocurrent+ ===> Instead use
     Photoconductivity
Photodarkening+ ===> Instead use
     Photochromism
Photodetectors
Photodiodes
Photodissociation lasers+ ===> Instead use
     Chemical lasers
Photoelasticity
Photoelectricity
Photoemission+ ===> Instead use
     Photoelectricity
Photogalvanic effects+ ===> Instead use
     Photoconductivity+ ===> Instead use
     Photovoltaic effects
Photography
Photoionization
Photolithography
Photoluminescence
Photomagnetic devices+ ===> Instead use
     Magnetooptic devices
Photomagnetic effects+ ===> Instead use
     Magnetooptic effects
Photometry
Photomultipliers
Photon beams
Photon radiation effects
Photonic switching systems
Photopolymers+ ===> Instead use
     Optical polymers
Photorefractive effect
Photorefractive materials
Photoresists+ ===> Instead use
     Resists
Photosynthesis
Photothermal effects
Photothyristors
Phototransistors
Phototubes+ ===> Instead use
     Photoelectricity
Photovoltaic cell doping
Photovoltaic cell fabrication
   SN   Use for commercial or noncommercial processes
Photovoltaic cell ion implantation
Photovoltaic cell materials
Photovoltaic cell measurements
Photovoltaic cell metallization
Photovoltaic cell noise

Photovoltaic cell packaging
Photovoltaic cell radiation effects
Photovoltaic cell reliability
Photovoltaic cell testing
Photovoltaic cell thermal factors
Photovoltaic cells
Photovoltaic detectors
Photovoltaic effects
Photovoltaic power systems
Photovoltaic space power systems
Physical optics
Physical theory of diffraction
Physics
Picture archiving and communication systems
Picture processing+ ===> Instead use
     Image processing
Picture tubes+ ===> Instead use
     TV displays
PID control+ ===> Instead use
     Proportional control
Piecewise constant approximation
Piecewise linear approximation
Piecewise polynomial approximation
Piezoceramics+ ===> Instead use
     Piezoelectric materials
Piezoelectric devices
Piezoelectric effects+ ===> Instead use
     Piezoelectricity
Piezoelectric films
Piezoelectric materials
Piezoelectric motors+ ===> Instead use
     Acoustic motors
Piezoelectric radiation effects
Piezoelectric resonator filters
Piezoelectric resonator oscillators
Piezoelectric resonators
Piezoelectric semiconductors
Piezoelectric transducers
Piezoelectricity
Piezomagnetic effects+ ===> Instead use
     Magnetomechanical effects
Piezooptic effects
Piezoresistance
Piezoresistive devices
Piezoresistors+ ===> Instead use
     Piezoresistive devices
Pions+ ===> Instead use
     Mesons
Pipe cables
Pipeline arithmetic
Pipeline processing
Pipelines
Piracy (software)+ ===> Instead use
     Computer crime
PLA+ ===> Instead use
     Programmable logic arrays
Planar arrays

Planar transmission lines
Planar waveguides
Planetary atmospheres
Planets
Planning
Plants (industrial)+ ===> Instead use
     Industrial plants
Plasma applications
Plasma arc devices
Plasma chemical vapor deposition+ ===> Instead use
     Plasma CVD
Plasma confinement
Plasma control
Plasma covered antennas
Plasma CVD
Plasma devices
Plasma diagnostics+ ===> Instead use
     Plasma measurements
Plasma displays+ ===> Instead use
     Gas discharge displays
Plasma engines
Plasma etching+ ===> Instead use
     Plasma materials-processing applications
Plasma focus
Plasma generation
Plasma heating
Plasma loaded waveguides
Plasma materials-processing applications
Plasma measurements
Plasma oscillations
Plasma pinch
Plasma properties
Plasma sheaths
Plasma stability
Plasma torches
Plasma waves
Plasmas
Plasmons
Plastic films
Plastic insulation
Plastic insulators
Plastic packaging
Plastics
Plastics industry
Plates
Platinum
Platinum alloys
Platinum compounds
Plethysmography
PLL+ ===> Instead use
     Phase locked loops
Plotters
Plutonium
PLZT ceramics
PM+ ===> Instead use
     Phase modulation
Pneumatic control equipment

```
Pneumatic systems
Pockels effect
Point processes
Point spread functions+ ===> Instead use
     Optical transfer functions
Pointing systems
Poisson distributions
Poisson processes
Polar regions+ ===> Instead use
     Arctic regions
Polarimetric radar+ ===> Instead use
     Radar polarimetry
Polarimetry
Polarization
Pole assignment
Poles and towers
          or "Power distribution mechanical factors" was used
Poles and zeros
Pollution
Pollution control
Pollution measurement
Polychlorinated biphenyls
Polyethylene insulation
Polyimide films
Polymers+ ===> Instead use
     Plastics
Polynomial approximation
Polynomial codes
Polynomial matrices
Polynomial transforms
Polynomials
Polypropylene films
Polypropylene insulation
Pontryagin maximum principle+ ===> Instead use
     Maximum principle
Popov criterion
Porcelain insulators
Portable radio communication
Ports+ ===> Instead use
     Marine ports and harbors
Position control
Position measurement
Position sensitive particle detectors
Positive immittance converters+ ===> Instead use
     Immittance converters
Positive immittance inverters+ ===> Instead use
     Immittance inverters
Positive real functions
Positron beams
Positron emission tomography
Positrons
Possibility theory
Postal services
Postscript+ ===> Instead use
     Page description languages
Posture
Potassium
```

```
Potassium alloys
Potassium compounds
Potential transformers+ ===> Instead use
     Voltage transformers
Potentiometers
Powdered magnetic materials
Powders
Power amplifiers
Power bipolar transistor amplifiers
Power bipolar transistor switches
Power bipolar transistors
Power cable connecting
Power cable installation
Power cable insulation
Power cable joints+ ===> Instead use
     Power cable connecting
Power cable mechanical factors
Power cable protective covering
Power cable sheathing+ ===> Instead use
     Power cable protective covering
Power cable shielding
Power cable splicing+ ===> Instead use
     Power cable connecting
Power cable testing
Power cable thermal factors
Power cables
Power capacitors
Power combiners
Power conditioning
Power consumption+ ===> Instead use
     Power demand
Power control
Power conversion
Power conversion harmonics
Power demand
Power distribution
Power distribution acoustic noise
Power distribution automation+ ===> Instead use
     Power distribution control
Power distribution biological effects
Power distribution cables+ ===> Instead use
     Power cables
Power distribution control
Power distribution economics
Power distribution electromagnetic interference
Power distribution faults
Power distribution harmonics+ ===> Instead use
     Power system harmonics
Power distribution lines
Power distribution maintenance
Power distribution mechanical factors
Power distribution meteorological factors
Power distribution noise (acoustic)+ ===> Instead use
     Power distribution acoustic noise
Power distribution planning
Power distribution protection
Power distribution reliability
```

```
Power distribution testing
Power distribution transformers+ ===> Instead use
     Power transformers
Power dividers
Power electronics
Power engineering
Power engineering education
Power factor+ ===> Instead use
     Reactive power
Power FET amplifiers
Power FET switches
Power FETs
Power filters
Power flow analysis+ ===> Instead use
     Load flow analysis
Power flow control+ ===> Instead use
     Load flow control
Power generation
Power generation acoustic noise
Power generation auxiliary systems
Power generation availability
Power generation control
Power generation dispatch
Power generation economics
Power generation excitation systems+ ===> Instead use
     AC generator excitation
Power generation faults
Power generation maintenance
Power generation mechanical factors
Power generation meteorological factors
Power generation noise (acoustic)+ ===> Instead use
     Power generation acoustic noise
Power generation peaking capacity
Power generation planning
Power generation protection
Power generation reliability
Power generation scheduling
Power generation testing
Power industry
Power integrated circuits
Power lasers
Power line filters+ ===> Instead use
     Power filters
Power measurement
Power MESFETs
Power MODFETs
Power MOSFETs
Power plants+ ===> Instead use
     Power generation
Power pools+ ===> Instead use
     Interconnected power systems
Power quality
Power semiconductor devices
Power semiconductor diode switches
Power semiconductor diodes
Power semiconductor switches
Power spectra+ ===> Instead use
```

     Spectral analysis
Power stations+ ===> Instead use
     Power generation
Power stations (space)+ ===> Instead use
     Space power stations
Power stations (substations)+ ===> Instead use
     Substations
Power supplies
Power system availability
Power system communication
Power system control
Power system dynamic stability
Power system economics
Power system faults
Power system harmonics
Power system identification
Power system interconnection+ ===> Instead use
     Interconnected power systems
Power system lightning effects
Power system maintenance
Power system measurements
Power system mechanical factors
Power system meteorological factors
Power system modeling
Power system monitoring
Power system parameter estimation
Power system planning
Power system protection
Power system protective relaying+ ===> Instead use
     Protective relaying
Power system relaying
Power system reliability
Power system restoration
Power system security
Power system simulation
Power system stability
Power system state estimation
Power system steady state stability+ ===> Instead use
     Power system dynamic stability
Power system telemetry+ ===> Instead use
     Power system communication
Power system testing
Power system transient stability
Power system transients
Power systems
Power transformer insulation
Power transformer insulation testing
Power transformer losses
Power transformer protection
Power transformer testing
Power transformer thermal factors
Power transformers
Power transistors
Power transmission
Power transmission acoustic noise
Power transmission biological effects
Power transmission cables+ ===> Instead use

Power cables
Power transmission control
Power transmission economics
Power transmission electromagnetic interference
Power transmission faults
Power transmission harmonics+ ===> Instead use
        Power system harmonics
Power transmission lines
Power transmission maintenance
Power transmission mechanical factors
Power transmission meteorological factors
Power transmission noise+ ===> Instead use
        Power transmission electromagnetic interference
Power transmission noise (acoustic)+ ===> Instead use
        Power transmission acoustic noise
Power transmission planning
Power transmission protection
Power transmission reliability
Power transmission testing
PPM+ ===> Instead use
        Pulse position modulation
Praseodymium
Praseodymium alloys
Praseodymium compounds
Precipitators
Prediction methods
Predictive control
Pressure control
Pressure effects
Pressure measurement
Print readers+ ===> Instead use
        Character recognition
Printed circuit antennas+ ===> Instead use
        Microstrip antennas
Printed circuit fabrication
    SN   Use for commercial and noncommercial processes
Printed circuit layout
Printed circuit testing
Printed circuits
Printers
Printing
Privacy
PRMA+ ===> Instead use
        Packet reservation multiaccess
Probabilistic approximation+ ===> Instead use
        Stochastic approximation
Probabilistic automata+ ===> Instead use
        Stochastic automata
Probabilistic circuits+ ===> Instead use
        Stochastic circuits
Probabilistic differential equations+ ===> Instead use
        Stochastic differential equations
Probabilistic games+ ===> Instead use
        Stochastic games
Probabilistic logic+ ===> Instead use
        Stochastic logic
Probabilistic logic circuits+ ===> Instead use

```
     Stochastic logic circuits
Probability
Probe antennas
Problem-solving
Process algebra
Process control
Process cooling
Process heating
Process monitoring
Processor scheduling
Processors (program)+ ===> Instead use
     Program processors
Procurement
Product codes
Product codes (consumer products)+ ===> Instead use
     Bar codes
Product development
Product liability
Product safety
Production control
Production management
Production systems
Productivity
Professional communication
Professional societies
Program assemblers
Program compilers
Program control structures
Program generators+ ===> Instead use
     Automatic programming
Program interpreters
Program processors
Programmable circuits
Programmable control
Programmable filters
Programmable logic arrays
Programmable logic devices
Programmable read only memory+ ===> Instead use
     PROM
Programmed instruction+ ===> Instead use
     Educational technology
Programming
Programming environments
        "Software development environments" was used
Programming languages+ ===> Instead use
     Computer languages
Programming profession
Programming theory
Project management
Projection chambers
Prolog
PROM
Proof systems+ ===> Instead use
     Theorem proving
Propagation
Proportional control
Proportional counters
```

Proposals
Propulsion
Prosthetics
Protection
Protective coatings
Protective relaying
Proteins
Protocols
Proton accelerators
Proton beams
Proton detectors
Proton linear accelerators
Proton radiation effects
Proton spectroscopy
Proton spectroscopy detectors
Proton storage rings
Protons
Proximity factors+ ===> Instead use
     Antenna proximity factors
Pseudonoise coded communication
Pseudonoise coded radar+ ===> Instead use
     Spread spectrum radar
Pseudonoise coding
Pseudonoise processes
Pseudorandom number generation+ ===> Instead use
     Random number generation
Pseudorandom sequences+ ===> Instead use
     Sequences
PSK+ ===> Instead use
     Phase shift keying
Psychology
PTD+ ===> Instead use
     Physical theory of diffraction
PTM+ ===> Instead use
     Pulse time modulation
Public key cryptography
Public safety
Public speaking
Publishing
Pulmonary system+ ===> Instead use
     Respiratory system
Pulp and paper industry
Pulse amplifiers
Pulse amplitude modulation
Pulse analysis
Pulse circuits
Pulse code modulation
Pulse compression circuits
Pulse compression methods
Pulse compression radar
Pulse Doppler radar
Pulse duration modulation+ ===> Instead use
     Pulse width modulation
Pulse excited antennas
Pulse frequency modulation
Pulse generation
Pulse height analyzers

```
Pulse inverters
Pulse measurements
Pulse modulation
Pulse position modulation
Pulse power system switches
Pulse power systems
Pulse propagation+ ===> Instead use
     Transient propagation
Pulse radar (Doppler)+ ===> Instead use
     Pulse Doppler radar
Pulse radar (monopulse)+ ===> Instead use
     Monopulse radar
Pulse shaping circuits
Pulse shaping methods
Pulse time modulation
Pulse transformers
Pulse width modulated inverters
Pulse width modulated power converters
Pulse width modulation
Pulsed lasers
Pumped storage power generation
Pumping of lasers+ ===> Instead use
     Laser excitation
Pumps
Punchthrough diodes
PWM+ ===> Instead use
     Pulse width modulation
Pylons+ ===> Instead use
     Poles and towers
Pyroelectric detectors
         "Infrared detectors" were used
Pyroelectric devices
Pyroelectricity
PZT ceramics
p-i-n diodes
p-i-n photodiodes
p-n heterojunctions
p-n junctions
Q measurement
Q factor
QAM+ ===> Instead use
     Quadrature amplitude modulation
QPSK+ ===> Instead use
     Quadrature phase shift keying
Quadratic programming
Quadrature amplitude modulation
Quadrature mirror filters
Quadrature phase shift keying
Quadtrees
Quality assurance
Quality control
Quality factor+ ===> Instead use
     Q factor
Quantization
Quantized control+ ===> Instead use
     Optimal control
Quantum boxes+ ===> Instead use
```

Quantum dots
Quantum confined Stark effect
Quantum dots
Quantum effect semiconductor devices
Quantum hall effect+ ===> Instead use
        Hall effect
Quantum theory
Quantum well devices
Quantum well lasers
Quantum wells
Quantum wires
Quartz
Query languages
Queuing analysis
Q factor
Q-switched lasers
R circuits+ ===> Instead use
        Resistive circuits
Radar
Radar altimetry
Radar antennas
Radar applications
Radar clutter
Radar countermeasures
Radar cross sections
Radar data processing
Radar detection
Radar displays
Radar distance measurement
Radar equipment
Radar imaging
Radar interference
Radar measurements
Radar meteorological factors
Radar navigation
Radar polarimetry
Radar position measurement
Radar receivers
Radar reflectivity+ ===> Instead use
        Radar scattering
Radar resolution
Radar scattering
Radar signal analysis
Radar signal processing
Radar target recognition
Radar terrain factors
Radar testing
Radar theory
Radar tracking
Radar transmitters
Radar velocity measurement
Radiation counters+ ===> Instead use
        Radiation detectors
Radiation detector circuits
Radiation detectors
Radiation dosimetry+ ===> Instead use
        Dosimetry

```
Radiation effects
Radiation hardening
Radiation monitoring
Radiation safety+ ===> Instead use
     Biological effects of radiation
Radiation therapy+ ===> Instead use
     Biomedical applications of radiation
Radio altimetry
Radio astronomy
Radio broadcast receivers
Radio broadcast transmitters
Radio broadcasting
Radio communication
Radio communication countermeasures
Radio communication equipment
Radio control
Radio distance measurement
Radio interference+ ===> Instead use
     Electromagnetic radiative interference
Radio interferometry
Radio LAN+ ===> Instead use
     Wireless LAN
Radio navigation
Radio noise+ ===> Instead use
     Electromagnetic radiative interference
Radio position measurement
Radio propagation
Radio propagation meteorological factors
Radio propagation terrain factors
Radio receivers
Radio relay+ ===> Instead use
     Radio repeaters
Radio repeaters
Radio sources (extraterrestrial)+ ===> Instead use
     Extraterrestrial radio sources
Radio spectrum management
Radio telemetry
Radio telephony+ ===> Instead use
     Cordless telephone systems
Radio telescopes+ ===> Instead use
     Radio astronomy
Radio tomography+ ===> Instead use
     Electromagnetic tomography
Radio tracking
Radio transceivers+ ===> Instead use
     Transceivers
Radio transmitters
Radio velocity measurement
Radioactive materials
Radioactive pollution
Radioactive waste
Radiography
Radioisotopes+ ===> Instead use
     Radioactive materials
Radioluminescence
Radiometry
Radiosondes
```

Radix conversion
Radomes
Radon transforms
Rail traffic control
Rail transportation
Rail transportation communication
Rail transportation control systems
Rail transportation electrical systems+ ===> Instead use
     Rail transportation power systems
Rail transportation electronics
Rail transportation maintenance
Rail transportation power systems
Rail transportation propulsion
Rail transportation reliability
Rail transportation testing
Railgun power supplies
Railguns
Rain
RAM+ ===> Instead use
     Random access memories
Raman lasers
Raman scattering
Raman spectroscopy
Random access communication+ ===> Instead use
     Multiaccess communication
Random access memories
Random arrays
Random codes
Random fields+ ===> Instead use
     Stochastic fields
Random media
Random noise
Random number generation
Random variables
Ranging+ ===> Instead use
     Distance measurement
Rapid prototyping+ ===> Instead use
     Software prototyping
Rapid thermal annealing
Rapid thermal processing
Rare earth alloys
Rare earth compounds
Rare earth metals
Rate distortion theory
Ratemeters+ ===> Instead use
     Radiation detectors
Rational approximation
Rational arithmetic
Rational functions
Rational matrices
Ray optics+ ===> Instead use
     Geometrical optics
Ray tracing
Rayleigh channels
Rayleigh distributions
Rayleigh scattering
Rayleigh waves

Rayleigh-Ritz methods
RC circuits
RCS+ ===> Instead use
    Radar cross sections
Reachability analysis
Reactance circuits+ ===> Instead use
    Lossless circuits
Reactive power
Reactive power control
Reactors+ ===> Instead use
    Inductors
Read diodes+ ===> Instead use
    IMPATT diodes
Read only memories
Real time systems
Realization theory
Receivers
Receiving antennas
Reclosing devices
Reconfigurable architectures
Reconnaissance
Recording
Rectangular waveguides
Rectifiers
Recurrent codes+ ===> Instead use
    Convolutional codes
Recurrent neural networks
Recursive digital filter stability+ ===> Instead use
    Digital filter wordlength effects
Recursive digital filters
Recursive estimation
Reduced instruction set computing
Reduced order systems
Redundancy
Redundant number systems
Redundant systems
Reed relays
Reed-Muller codes
Reed-Solomon codes
Reflection
Reflectometry
Reflector antenna blockage
Reflector antenna feeds
Reflector antenna mechanical factors
Reflector antennas
Refraction
Refrigeration+ ===> Instead use
    Cooling
Refuse+ ===> Instead use
    Waste materials
Regenerative stochastic processes
Registers
Regulators
Relational algebra
Relational databases
Relativistic effects
Relaxation methods

Relaxation oscillators
Relaxation processes
Relay control systems
Relays
Reliability
Reliability estimation
Reliability growth
Reliability management
Reliability modeling
Reliability testing
Reliability theory
Reluctance generators
Reluctance machines
Reluctance motor drives
Reluctance motor protection
Reluctance motors
Remanence
Remote handling
Remote procedure calls
Remote sensing
Remotely piloted aircraft
Rendering (computer graphics)
Renewal processes+ ===> Instead use
     Regenerative stochastic processes
Repair+ ===> Instead use
     Maintenance
Repeaters
Replicated databases
          was used
Report writing+ ===> Instead use
     Writing
Reproductive system
Research and development
Research and development economics
Research and development management
Research and development planning
Residue arithmetic
Residue codes
Resin insulation
Resins
Resistance
Resistance heating
Resistance measurement
Resistive circuits
Resistivity+ ===> Instead use
     Conductivity
Resistivity measurement+ ===> Instead use
     Conductivity measurement
Resistors
Resists
Resonance
Resonant power conversion
Resonant tunneling devices
Resonant tunneling diodes
Resonant tunneling transistors
Resonator filters
Resonators

Resource management
Respiratory system
Reverse engineering
Reviews
RF interference+ ===> Instead use
     Electromagnetic radiative interference
Rhodium
Rhodium alloys
Rhodium compounds
Rib waveguides
Riccati equations
Rician channels
Ridge waveguides
Ring arrays+ ===> Instead use
     Circular arrays
Ring lasers
Rings (algebraic)
RISC+ ===> Instead use
     Reduced instruction set computing
Risk analysis
Rivers
RL circuits
RLC circuits
Road traffic control
Road transportation
Road transportation communication
Road vehicle control
Road vehicle dispatch+ ===> Instead use
     Land mobile radio dispatch
Road vehicle electric propulsion
Road vehicle electrical systems+ ===> Instead use
     Road vehicle power systems
Road vehicle electronics
Road vehicle engines+ ===> Instead use
     Road vehicle propulsion
Road vehicle identification
Road vehicle location monitoring
Road vehicle maintenance
Road vehicle power systems
Road vehicle propulsion
Road vehicle radar
Road vehicle reliability
Road vehicle testing
Road vehicles
Robot dynamics
Robot kinematics
Robot programming
          were used
Robot sensing systems
Robot tactile systems
Robot vision systems
Robots
Robustness
Rockets
ROM+ ===> Instead use
     Read only memories
Room acoustics+ ===> Instead use

Architectural acoustics
Root loci
Roots+ ===> Instead use
      Poles and zeros
Rotating bodies
Rotating machine acoustic noise
Rotating machine electromagnetic interference
Rotating machine insulation
Rotating machine insulation testing
Rotating machine measurements
Rotating machine mechanical factors
Rotating machine nonlinear analysis
Rotating machine protection
Rotating machine stability
Rotating machine testing
Rotating machine thermal factors
Rotating machine transient analysis
Rotating machines
Rough surfaces
Roundoff errors
          analysis" were used
Routh methods
Routing
Routing protocols+ ===> Instead use
      Communication system routing
RPC+ ===> Instead use
      Remote procedure calls
RTA+ ===> Instead use
      Rapid thermal annealing
Rubber
Rubber industry
Rubber insulation
Rubidium
Rubidium alloys
Rubidium compounds
Rule based systems+ ===> Instead use
      Knowledge based systems
Run length codes
Rural areas
Ruthenium
Ruthenium alloys
Ruthenium compounds
Safety
Samarium
Samarium alloys
Samarium compounds
Sample and hold circuits
Sampled data circuits
Sampled data filters
Sampled data systems
Sampling methods
Sapphire
SAR+ ===> Instead use
      Synthetic aperture radar
Satellite antennas
Satellite applications
Satellite broadcasting

Satellite communication
Satellite communication earth terminals
Satellite communication onboard systems
Satellite computers+ ===> Instead use
     Space vehicle computers
Satellite control+ ===> Instead use
     Space vehicle control
Satellite electrical systems+ ===> Instead use
     Space vehicle power systems
Satellite mobile communication
Satellite navigation systems
Satellite power systems+ ===> Instead use
     Space vehicle power systems
Satellite propulsion+ ===> Instead use
     Space vehicle propulsion
Satellite relay systems+ ===> Instead use
     Satellite communication
Satellite tracking
   SN   Use for tracking of, not by, satellite
Satellites
Saturable cores
SAW+ ===> Instead use
     Surface acoustic waves
SCADA systems
Scaling circuits+ ===> Instead use
     Counting circuits
Scandium
Scandium alloys
Scandium compounds
Scanning antennas
Scatter channels
Scattering
Scattering matrices
Scattering parameters
Scattering parameters measurement
Scene analysis+ ===> Instead use
     Image analysis
Scheduling
Schottky barriers
Schottky contacts+ ===> Instead use
     Schottky barriers
Schottky diode frequency converters
Schottky diode mixers
Schottky diodes
Schottky FETs+ ===> Instead use
     MESFETs
Schottky logic circuits
Schottky logic devices
Science
Scientific visualization
Scintillation detectors
SCM+ ===> Instead use
     Subcarrier multiplexing
SCR+ ===> Instead use
     Thyristors
Screens+ ===> Instead use
     Apertures

```
SDH+ ===> Instead use
     Synchronous digital hierarchy
SDM+ ===> Instead use
     Space division multiplexing
Sea
Sea animals+ ===> Instead use
     Marine animals
Sea coast
Sea floor
Sea ice
Sea measurements
Sea surface
Sea surface electromagnetic scattering
Sea vegetation+ ===> Instead use
     Marine vegetation
Seals
Search methods
Search radar
Second breakdown
Secondary electron emission+ ===> Instead use
     Electron emission
Secondary ion emission+ ===> Instead use
     Ion emission
Secondary radar
Security
Sediments
Seebeck effect+ ===> Instead use
     Thermoelectricity
Seismic factors
Seismic inverse problems
Seismic measurements
Seismic signal processing
Seismic transducers
Seismic waves
Seismology
Self-dual codes+ ===> Instead use
     Dual codes
Self-electrooptic-effect devices
Self-focusing
Self-induced transparency
Self-organizing control
Self-organizing feature maps
Self-pulsing lasers+ ===> Instead use
     Pulsed lasers
Self-testing
Self-trapping+ ===> Instead use
     Self-focusing
Self-tuning regulators+ ===> Instead use
     Adaptive control
Semantic networks
Semiconductor charge carriers+ ===> Instead use
     Charge carrier processes
Semiconductor controlled rectifiers+ ===> Instead use
     Thyristors
Semiconductor defects
Semiconductor device bonding
Semiconductor device breakdown
```

```
Semiconductor device doping
Semiconductor device economics
Semiconductor device fabrication
     SN   For commercial manufacture, use "Semiconductor device
manufacture"
Semiconductor device ion implantation
Semiconductor device manufacture
     SN   For noncommercial processes, use "Semiconductor device
fabrication"
Semiconductor device measurements
Semiconductor device mechanical factors
Semiconductor device metallization
Semiconductor device modeling
Semiconductor device noise
Semiconductor device packaging
Semiconductor device radiation effects
Semiconductor device reliability
Semiconductor device testing
Semiconductor device thermal factors
Semiconductor devices
Semiconductor diode switches
Semiconductor diodes
Semiconductor electronics industry+ ===> Instead use
     Electronics industry
Semiconductor epitaxial layers
Semiconductor films
Semiconductor glasses+ ===> Instead use
     Amorphous semiconductors
Semiconductor growth
Semiconductor heterojunctions
Semiconductor impurities
Semiconductor junctions
Semiconductor laser arrays
Semiconductor lasers
Semiconductor loaded waveguides
Semiconductor logic devices
Semiconductor materials
Semiconductor materials measurements
Semiconductor memories
Semiconductor noise+ ===> Instead use
     Semiconductor device noise
Semiconductor optical amplifiers
Semiconductor plasmas
Semiconductor process modeling
Semiconductor radiation detectors
Semiconductor relays
Semiconductor superlattices
Semiconductor switches
Semiconductor waveguides
Semiconductor-insulator interfaces
Semiconductor-insulator-semiconductor devices
Semiconductor-metal interfaces
Semicustom integrated circuits+ ===> Instead use
     Application specific integrated circuits
Sensitivity
Sensors+ ===> Instead use
     Detectors+ ===> Instead use
```

Transducers
Sensors (image)+ ===> Instead use
        Image sensors
Sensory aids
Separation
Separation by implantation of oxygen+ ===> Instead use
        SIMOX
Separators+ ===> Instead use
        Particle separators
Sequence estimation
Sequences
Sequential coding
Sequential decision procedures
Sequential decoding
Sequential detection
Sequential estimation
Sequential logic circuit fault diagnosis
Sequential logic circuit fault tolerance
Sequential logic circuit testing
Sequential logic circuits
Sequential machines
Series (mathematics)
Servers (network)+ ===> Instead use
        Network servers
Servomotors
Servos+ ===> Instead use
        Servomotors
Servosystems
Set theory
SF6
SGML+ ===> Instead use
        Page description languages
Shaded pole motors+ ===> Instead use
        Induction motors
Shape
Shape control
Shape measurement
Shaped beam antennas
Shaping filters
Shared memory systems
Shielding
Shift registers
Ships+ ===> Instead use
        Marine vehicles
Shock+ ===> Instead use
        Electric shock
Shock waves
Short circuit currents
Short take-off and landing aircraft
Shot noise
Side-looking airborne radar
Sigma-delta modulation
Signal analysis
Signal classification+ ===> Instead use
        Pattern classification
Signal decomposition+ ===> Instead use
        Signal resolution

Signal design
Signal detection
Signal estimation+ ===> Instead use
     Estimation
Signal flow graphs
Signal generators
Signal processing
Signal processing antennas
Signal quantization+ ===> Instead use
     Quantization
Signal reconstruction
Signal representations
Signal resolution
Signal restoration
Signal sampling
Signal synthesis
Signaling systems+ ===> Instead use
     Communication system signaling
Signals
   SN   Use only for treatment of generalized signals
Signature verification+ ===> Instead use
     Handwriting recognition
Silicon
Silicon alloys
Silicon compilers+ ===> Instead use
     Compilers (silicon)
Silicon compounds
Silicon controlled rectifiers+ ===> Instead use
     Thyristors
Silicon on insulator technology
Silicon radiation detectors
Silicon steel
Silicone insulation
Silicone rubber
Silicone rubber insulators
Silicones
Silver
Silver alloys
Silver compounds
SIMOX
Simulated annealing
Simulation
Simulation languages
Simulation software
Single photon emission computed tomography
Singular optimal control
Singular systems
Singular value decomposition
Singularly perturbed systems
SIS devices (semiconductor)+ ===> Instead use
     Semiconductor-insulator-semiconductor devices
SIS devices (superconductor)+ ===> Instead use
     Superconductor-insulator-superconductor devices
SIT+ ===> Instead use
     Static induction transistors
Site security monitoring
Size control

Size measurement
Skin
Skin effect
Slab waveguides+ ===> Instead use
     Optical planar waveguides
SLAR+ ===> Instead use
     Side-looking airborne radar
SLD+ ===> Instead use
     Superluminescent diodes
Sleep
Sliding block codes
Sliding mode control+ ===> Instead use
     Variable structure systems
SLM+ ===> Instead use
     Spatial light modulators
Slot antennas
Slot arrays
Slotline
Slotline circuits
Slotline components
Slotline transitions
Slow wave structures
Smart actuators+ ===> Instead use
     Intelligent actuators
Smart cards
Smart materials+ ===> Instead use
     Intelligent materials
Smart pixels
Smart sensors+ ===> Instead use
     Intelligent sensors
Smart structures+ ===> Instead use
     Intelligent structures
Smell+ ===> Instead use
     Olfactory system
Smoothing methods
Snow
SNS devices+ ===> Instead use
     Superconductor-normal-superconductor devices
Snubbers
Social factors
Sodium
Sodium alloys
Sodium compounds
Soft magnetic films
Soft magnetic layered films
Soft magnetic materials
Software
Software debugging
Software development+ ===> Instead use
     Programming
Software development environments+ ===> Instead use
     Programming environments
Software development management
Software documentation+ ===> Instead use
     Documentation
Software economics
Software engineering

Software fault diagnosis
Software fault tolerance
Software libraries
Software maintenance
Software management
Software metrics
Software packages
Software performance
Software piracy+ ===> Instead use
     Computer crime
Software portability
Software protection
Software prototyping
Software quality
Software reliability
Software reliability growth
Software requirements and specifications
Software reusability
Software reviews
Software safety
Software standards
Software testing
Software tools
Software verification and validation
SOI+ ===> Instead use
     Silicon on insulator technology
Soil
Soil measurements
Solar cells+ ===> Instead use
     Photovoltaic cells
Solar cooling+ ===> Instead use
     Cooling
Solar energy
Solar heating
Solar power generation
Solar power satellites
Solar radiation
Soldering
Solenoids
Solid lasers
Solid models+ ===> Instead use
     Geometric modeling
Solid state plasmas
Solid state rectifiers
Solids
Solitons
Sonar
Sonar applications
Sonar arrays
Sonar data processing+ ===> Instead use
     Sonar signal processing
Sonar detection
Sonar distance measurement
Sonar imaging
Sonar measurements
Sonar navigation
Sonar position measurement

```
Sonar receivers+ ===> Instead use
     Sonar transducers
Sonar scattering
Sonar signal analysis
Sonar signal processing
Sonar target recognition
Sonar terrain factors
Sonar tracking
Sonar transducers
Sonar transmitters+ ===> Instead use
     Sonar transducers
Sonar velocity measurement
SONET
Sorting
SOS (silicon on sapphire)+ ===> Instead use
     Silicon on insulator technology
Sound systems+ ===> Instead use
     Audio systems
Source coding
Source location+ ===> Instead use
     Position measurement
Space charge
Space charge limited conduction
Space charge waves
Space cooling+ ===> Instead use
     Air conditioning
Space division multiplexing
Space division switching
Space exploration+ ===> Instead use
     Extraterrestrial exploration
Space heating
Space measurements+ ===> Instead use
     Extraterrestrial measurements
Space phenomena+ ===> Instead use
     Extraterrestrial phenomena
Space power stations
Space shuttles
Space stations
Space technology
Space vehicle antennas
Space vehicle communication
Space vehicle computers
Space vehicle control
Space vehicle electrical systems+ ===> Instead use
     Space vehicle power systems
Space vehicle electronics
Space vehicle maintenance
Space vehicle photovoltaic power systems+ ===> Instead use
     Photovoltaic space power systems
Space vehicle power systems
Space vehicle propulsion
Space vehicle reliability
Space vehicle telemetry
Space vehicle testing
Space vehicle tracking
Space vehicles
Spaceborne radar
```

Spark chambers
Spark gaps
Sparks
Sparse matrices
Spatial data structures
Spatial filters
Spatial hole burning+ ===> Instead use
     Optical hole burning
Spatial light modulators
Spatial reasoning
Speaker recognition
Special issues and sections
Specification languages
Speckle
SPECT+ ===> Instead use
     Single photon emission computed tomography
Spectacle lenses+ ===> Instead use
     Ophthalmic lenses
Spectral analysis
Spectral domain analysis
Spectral estimation+ ===> Instead use
     Spectral analysis
Spectral factorization
Spectral hole burning+ ===> Instead use
     Optical hole burning
Spectrochemical analysis
Spectrometry+ ===> Instead use
     Spectroscopy
Spectroscopy
Spectrum analysis+ ===> Instead use
     Spectral analysis
Spectrum management+ ===> Instead use
     Radio spectrum management
Speech analysis
Speech codecs
Speech coding
Speech communication
Speech enhancement
Speech intelligibility
Speech processing
Speech recognition
Speech synthesis
Speechmaking+ ===> Instead use
     Public speaking
Speed control+ ===> Instead use
     Velocity control
Speed measurement+ ===> Instead use
     Velocity measurement
Spheres
Spherical antennas
Spheroids
SPICE
Spin+ ===> Instead use
     Quantum theory
Spin-flip lasers+ ===> Instead use
     Raman lasers
Spiral antennas

Spline functions
Split phase motors+ ===> Instead use
      Induction motors
Spontaneous emission
Spraying
Spread spectrum communication
Spread spectrum radar
Spreadsheet programs
Spurline
Spurline components
Sputter etching
Sputtering
Square arrays+ ===> Instead use
      Planar arrays
Square wave generators
Square-rooting
Squaring+ ===> Instead use
      Exponentiation
SQUID magnetometers
SQUIDs
Squirrel cage motors
SRAM chips
Stability
Stability criteria
Standardization
Standards
Standby generators
Standby power supplies+ ===> Instead use
      Emergency power supplies
Standing wave measurements
Stark effect
Starting
State assignment
State estimation
State feedback
State space methods
Static induction transistors
Static VAR compensators
Statistical databases
Statistics
Steady state stability+ ===> Instead use
      Power system dynamic stability
Steam generation
Steam turbines
Steel
Steel industry+ ===> Instead use
      Metals industry
Stellarators
Stepper motors
Stereo displays+ ===> Instead use
      Three-dimensional displays
Stereo vision
Stereophonic systems+ ===> Instead use
      Audio systems
Stimulated emission
Stimulated Rayleigh scattering+ ===> Instead use
      Rayleigh scattering

```
Stirling engines+ ===> Instead use
     Heat engines
Stochastic approximation
Stochastic automata
Stochastic circuits
Stochastic differential equations
Stochastic fields
Stochastic games
Stochastic logic
Stochastic logic circuits
Stochastic optimal control
Stochastic processes
Stochastic systems
STOL aircraft+ ===> Instead use
     Short take-off and landing aircraft
Storage+ ===> Instead use
     Memories
Storage rings
Store and forward switching
Storms
Strain
Strain control
Strain measurement
Stranded conductors
Strategic planning
Stratified media+ ===> Instead use
     Nonhomogeneous media
Stratosphere+ ===> Instead use
     Terrestrial atmosphere
Stress
Stress control
Stress measurement
Stress physiology
Stress (psychological)+ ===> Instead use
     Human factors
String matching
Strip conductors
Strip scatterers
Stripline
Stripline circuits
Stripline components
Stripline couplers
Stripline discontinuities
Stripline filters
Stripline resonators
Stripline transitions
Structural engineering
Structured programming
Student experiments
Subcarrier multiplexing
Submarine technology+ ===> Instead use
     Underwater technology
Submarines+ ===> Instead use
     Underwater vehicles
Submersibles+ ===> Instead use
     Underwater vehicles
Submillimeter wave amplifiers
```

Submillimeter wave antennas
Submillimeter wave attenuators
Submillimeter wave bipolar transistors
Submillimeter wave circuits
Submillimeter wave circulators
Submillimeter wave communication
Submillimeter wave couplers
Submillimeter wave detectors
Submillimeter wave devices
Submillimeter wave diodes
Submillimeter wave directional couplers
Submillimeter wave FETs
Submillimeter wave filters
Submillimeter wave frequency conversion
Submillimeter wave generation
Submillimeter wave imagimg
Submillimeter wave integrated circuits
Submillimeter wave isolators
Submillimeter wave lasers
Submillimeter wave measurements
Submillimeter wave mixers
Submillimeter wave modulation
Submillimeter wave oscillators
Submillimeter wave phase shifters
Submillimeter wave power amplifiers
Submillimeter wave propagation
Submillimeter wave radiation effects+ ===> Instead use
      Electromagnetic radiation effects
Submillimeter wave radio communication
Submillimeter wave radio propagation
Submillimeter wave radiometry
Submillimeter wave receivers
Submillimeter wave repeaters
Submillimeter wave resonators
Submillimeter wave spectroscopy
Submillimeter wave switches
Submillimeter wave technology
Submillimeter wave transistors
Submillimeter wave transmitters
Submillimeter wave tubes
Submillimeter wave waveguides
Suboptimal control
Subroutines+ ===> Instead use
      Algorithms
Subscriber loops
Subscriber sets+ ===> Instead use
      Telephone sets
Substation insulation
Substation measurements
Substation switching
Substations
Subsynchronous resonance
Subtraction
Suburban areas
Sulfur
Sulfur compounds
Sulfur hexafluoride+ ===> Instead use

SF6
Summing circuits
Supercomputers
Superconducting accelerator cavities
Superconducting accelerator magnets
Superconducting accelerators
Superconducting cables
Superconducting cavity resonators
Superconducting coils
Superconducting composites
Superconducting device charge carriers+ ===> Instead use
        Charge carrier processes
Superconducting device fabrication
    SN   Use for commercial and noncommercial processes
Superconducting device measurements
Superconducting device noise
Superconducting device packaging
Superconducting device radiation effects
Superconducting device reliability
Superconducting device testing
Superconducting devices
Superconducting epitaxial layers
Superconducting filaments and wires
Superconducting films
Superconducting filters
Superconducting integrated circuits
            circuits" were used
Superconducting linear accelerators
Superconducting magnet energy storage
Superconducting magnet mechanical factors
Superconducting magnets
Superconducting materials
Superconducting materials growth
Superconducting materials measurements
Superconducting materials mechanical factors
Superconducting materials radiation effects
Superconducting microwave devices
Superconducting phase shifters
Superconducting quantum interference devices+ ===> Instead use
        SQUIDs
Superconducting radiation detectors
Superconducting resonators
Superconducting rotating machines
Superconducting superlattices+ ===> Instead use
        Superlattices
Superconducting switches
Superconducting tapes
Superconducting transformers
Superconducting transistors
Superconducting transmission lines
Superconducting wires+ ===> Instead use
        Superconducting filaments and wires
Superconductors (high-temperature)+ ===> Instead use
        High-temperature superconductors
Superconductor-insulator-superconductor devices
Superconductor-insulator-superconductor mixers
Superconductor-normal-superconductor devices

Superconductor-semiconductor devices
Superlattices
Superluminescent diodes
Superradiance+ ===> Instead use
     Spontaneous emission
Supervisory control and data acquisition systems+ ===> Instead use
     SCADA systems
Supervisory programs+ ===> Instead use
     Operating systems
Surface acoustic wave convolvers
Surface acoustic wave correlators
Surface acoustic wave couplers
Surface acoustic wave delay lines
Surface acoustic wave detectors
Surface acoustic wave device fabrication
   SN   Use for commercial and noncommercial processes
Surface acoustic wave device thermal factors
Surface acoustic wave devices
Surface acoustic wave directional couplers
Surface acoustic wave filters
Surface acoustic wave materials
Surface acoustic wave oscillators
Surface acoustic wave pulse compression
Surface acoustic wave resonator filters
Surface acoustic wave resonators
Surface acoustic wave signal processing
Surface acoustic wave transducers
Surface acoustic waves
Surface charging
Surface cleaning
Surface contamination
Surface discharges
Surface fitting
Surface mounting
Surface treatment
Surface waves
Surfaces
Surface-emitting lasers
Surge protection
Surgery
Surges
          "Arresters" was used
Surveillance
Surveillance radar+ ===> Instead use
     Search radar
Susceptibility (magnetic)+ ===> Instead use
     Magnetic susceptibility
Switched capacitor circuits
Switched capacitor filters
Switched circuits
Switched filters
Switched mode power supplies
Switched resistor circuits
Switched resistor filters
Switched systems
Switches
Switchgear

```
Switchgear testing
Switching amplifiers
Switching circuits
Switching functions
Switching regulators+ ===> Instead use
     DC-DC power conversion
Switching systems
Switching transients
Symbol manipulation
Symbolic computation+ ===> Instead use
     Symbol manipulation
Symbols
Synchrocyclotrons
Synchronization
Synchronous detection
Synchronous digital hierarchy
Synchronous generator excitation
Synchronous generator stability
Synchronous generator transient analysis
Synchronous generators
Synchronous machines
Synchronous motor drives
Synchronous motor protection
Synchronous motors
Synchronous optical network+ ===> Instead use
     SONET
Synchrophasotrons+ ===> Instead use
     Synchrocyclotrons
Synchrotron radiation
Synchrotrons
Synthetic aperture imaging
   SN   For radar imaging, use "Synthetic aperture radar"
   SN   For sonar imaging, use "Synthetic aperture sonar"
Synthetic aperture radar
Synthetic aperture sonar
System analysis and design
System availability+ ===> Instead use
     Availability
System engineering education+ ===> Instead use
     Systems engineering education
System identification+ ===> Instead use
     Identification
System modeling+ ===> Instead use
     Modeling
System planning+ ===> Instead use
     Planning
System recovery
System reliability+ ===> Instead use
     Reliability
System software
Systems engineering
Systems engineering education
Systolic arrays
Table lookup
Tachometers
Tactile displays
Tactile sensors
```

```
Tactile system
Tactile systems (nonbiological)
Tamed frequency modulation+ ===> Instead use
     Continuous phase modulation
Tape recording+ ===> Instead use
     Magnetic tape recording
Taps+ ===> Instead use
     Optical couplers
Target detection+ ===> Instead use
     Object detection
Target detection (aircraft)+ ===> Instead use
     Aircraft detection and tracking
Target detection (marine vehicle)+ ===> Instead use
     Marine vehicle detection and tracking
Target detection (missile)+ ===> Instead use
     Missile detection and tracking
Target recognition+ ===> Instead use
     Object recognition
Target recognition (radar)+ ===> Instead use
     Radar target recognition
Target recognition (sonar)+ ===> Instead use
     Sonar target recognition
TDM+ ===> Instead use
     Time division multiplexing
TDMA+ ===> Instead use
     Time division multiaccess
TEA lasers+ ===> Instead use
     Gas lasers
Teaching+ ===> Instead use
     Education
Team theory+ ===> Instead use
     Distributed decision-making
Technical communication+ ===> Instead use
     Professional communication
Technical journals+ ===> Instead use
     Journals
Technical manuals+ ===> Instead use
     Manuals
Technical meetings+ ===> Instead use
     Meetings
Technical proposals+ ===> Instead use
     Proposals
Technical reports+ ===> Instead use
     Writing
Technical writing+ ===> Instead use
     Writing
Technician training+ ===> Instead use
     Training
Technological innovation
Technology
Technology assessment
Technology forecasting
Technology planning
Technology social factors
Technology transfer
Telecommunication+ ===> Instead use
     Communication systems
```

Teleconferencing
Telegraphy
Telemetry
Telephone equipment
Telephone exchanges
Telephone sets
          Before 1995, "Telephone systems" and "Communication terminals"
were used
Telephony
Teleprinting
Telerobotics
Telescopes
Teletext
Television+ ===> Instead use
     TV
Teleworking
Tellurium
Tellurium alloys
Tellurium compounds
Temperature
Temperature control
Temperature measurement
Temporal databases
Temporal logic
Temporal reasoning
Terbium
Terbium alloys
Terbium compounds
Terminology
Ternary logic+ ===> Instead use
     Multivalued logic
Terrain factors
Terrain mapping
Terrestrial atmosphere
Tessellation automata+ ===> Instead use
     Cellular automata
Test equipment
Test facilities
Testing
Text communication
Text processing
Text recognition
Textile industry
Theorem proving
Therapy+ ===> Instead use
     Medical treatment
Thermal converters
Thermal energy storage
Thermal factors
Thermal image sensors+ ===> Instead use
     Infrared image sensors
Thermal power generation
Thermal variables control
Thermal variables measurement
Thermal wave imaging+ ===> Instead use
     Photothermal effects
Thermally stimulated currents

Thermionic emission
Thermionic energy conversion
Thermistors
Thermochromism+ ===> Instead use
     Thermooptic effects
Thermoelasticity
Thermoelectric devices
Thermoelectric effect+ ===> Instead use
     Thermoelectricity
Thermoelectric energy conversion
Thermoelectricity
Thermoluminescence
Thermomagnetic factors+ ===> Instead use
     Magnetic thermal factors
Thermomagnetic recording
Thermonuclear fusion+ ===> Instead use
     Fusion reactors
Thermooptic effects
Thermoreflectance+ ===> Instead use
     Thermooptic effects
Thermoresistivity
Thermosonic bonding+ ===> Instead use
     Acoustic bonding
Thick film capacitors
Thick film circuit bonding
Thick film circuit fabrication
   SN   Use for commercial and noncommercial processes.
Thick film circuit interconnections
Thick film circuit packaging
Thick film circuit reliability
Thick film circuit thermal factors
Thick film circuits
Thick film devices
Thick film inductors
Thick film resistors
Thick films
Thickness control
Thickness measurement
Thin film capacitors
Thin film circuit bonding
Thin film circuit fabrication
   SN   Use for commercial and noncommercial processes
Thin film circuit interconnections
Thin film circuit packaging
Thin film circuit reliability
Thin film circuit thermal factors
Thin film circuits
Thin film devices
Thin film inductors
Thin film resistors
Thin film transistors
Thin film waveguides+ ===> Instead use
     Optical planar waveguides
Thin films
Three-dimensional displays
Three-dimensional vision+ ===> Instead use
     Stereo vision

Threshold decoding
Threshold logic
Threshold logic circuits
Threshold logic devices
Threshold logic functions
Throughput (communication systems)+ ===> Instead use
     Information rates
Thulium
Thulium alloys
Thulium compounds
Thyratrons
Thyristor applications
Thyristor circuits
Thyristor converters
Thyristor motor drives
Thyristors
Tidal power generation
Tides
Tightly coupled microprocessors+ ===> Instead use
     Shared memory systems
Tightly coupled multiprocessors+ ===> Instead use
     Shared memory systems
Time delay+ ===> Instead use
     Delay effects
Time difference of arrival estimation+ ===> Instead use
     Delay estimation
Time dissemination
Time division multiaccess
Time division multiplexing
Time division switching
Time domain analysis
Time domain measurements
Time domain reflectometry
Time measurement
Time of arrival estimation+ ===> Instead use
     Delay estimation
Time optimal control
Time oriented databases+ ===> Instead use
     Temporal databases
Time projection chambers+ ===> Instead use
     Projection chambers
Time series
Time synchronization+ ===> Instead use
     Synchronization
Time-frequency analysis
          analysis" were used. In 1994, "Time-domain analysis" was used
Time-sharing computer systems
Time-varying channels
Time-varying circuits
Time-varying filters
Time-varying systems
Timing
Timing circuits
Timing jitter
Tin
Tin alloys
Tin compounds

```
Tire manufacture+ ===> Instead use
     Rubber industry
Tissues (biological)+ ===> Instead use
     Biological tissues
Titanium
Titanium alloys
Titanium compounds
Toeplitz matrices
Tokamaks
Token networks
Tolerance analysis
Tomography
Topography+ ===> Instead use
     Surfaces
Topography (earth)+ ===> Instead use
     Terrain mapping
Topology
Torque
Torque control
Torque measurement
Torso
Touch sensors+ ===> Instead use
     Tactile sensors
Towers+ ===> Instead use
     Poles and towers
TR devices+ ===> Instead use
     Radar equipment+ ===> Instead use
     Switches
Tracking
Tracking filters
Tracking loops
Traction motor drives
Traction motor protection
Traction motors
Trade+ ===> Instead use
     Business
Trade (international)+ ===> Instead use
     International trade
Trademarks
Traffic control (communication)
Traffic control (transportation)
Traffic information systems
Training
Transceivers
Transconductors+ ===> Instead use
     Transducers
Transducers
Transfer function matrices
Transfer functions
Transfer standards
Transferred electron devices+ ===> Instead use
     Gunn devices
Transform coding
Transformer cores
Transformer oil+ ===> Instead use
     Oil insulation
Transformer windings
```

```
Transformers
Transforms
Transient analysis
Transient gratings+ ===> Instead use
     Gratings
Transient propagation
Transient response
Transient scattering
Transient stability+ ===> Instead use
     Power system transient stability
Transistors
Transistor-transistor logic
Transition metal alloys
Transition metal compounds
Transition metals
Transmission coefficient measurement+ ===> Instead use
     Scattering parameters measurement
Transmission line circuits+ ===> Instead use
     Distributed parameter circuits
Transmission line discontinuities
Transmission line filters+ ===> Instead use
     Distributed parameter filters
Transmission line matrix methods
Transmission line measurements
Transmission line resonators
Transmission line theory
Transmission lines
Transmission of electric power+ ===> Instead use
     Power transmission
Transmitters
Transmitting antennas
Transmultiplexing
Transponders
Transport protocols
Transportation
Transportation networks+ ===> Instead use
     Networks
Transversal filters
Transverse wave tubes+ ===> Instead use
     Traveling wave tubes
Transversely excited lasers+ ===> Instead use
     Gas lasers
Trapping+ ===> Instead use
     Charge carrier processes
Traveling salesman problems
Traveling wave amplifiers
Traveling wave antennas
Traveling wave arrays
Traveling wave devices
Traveling wave lasers+ ===> Instead use
     Ring lasers
Traveling wave tubes
Tree codes
Tree data structures
Tree searching
Trees (botanical)+ ===> Instead use
     Vegetation
```

Trees (graphs)
Trees (insulation)
Trellis coded modulation
Trellis codes
Triacs+ ===> Instead use
     Thyristors
Triboelectricity
Trigger circuits
Triggering
Trigonometric functions+ ===> Instead use
     Periodic functions
Tritium
Tropical regions
Troposphere+ ===> Instead use
     Terrestrial atmosphere
Truncation errors+ ===> Instead use
     Finite wordlength effects
Truth maintenance
TSC+ ===> Instead use
     Thermally stimulated currents
TTL+ ===> Instead use
     Transistor-transistor logic
Tubes+ ===> Instead use
     Electron tubes
Tumors
Tunable amplifiers
Tunable circuits and devices
Tunable filters
Tunable oscillators
Tuners
Tungsten
Tungsten alloys
Tungsten compounds
Tuning
Tunnel diode amplifiers
Tunnel diode circuits
Tunnel diode oscillators
Tunnel diodes
Tunnel effect+ ===> Instead use
     Tunneling
Tunnel transistors
Tunneling
Turbines
Turbogenerators
Turbulent media+ ===> Instead use
     Random media
Turing machines
TV
TV broadcasting
TV cameras
TV displays
TV distortion
TV equipment
TV image sensors
TV imaging
TV interference
TV picture tubes+ ===> Instead use

```
     TV displays
TV receiver audio systems
TV receiver circuits
TV receiver deflection circuits+ ===> Instead use
     TV displays
TV receiver signal processing+ ===> Instead use
     Video signal processing
TV receiver sound systems+ ===> Instead use
     TV receiver audio systems
TV receiver tuners
TV receivers
TV surveillance systems
TV transmitters
Twisted pair cables
Two-manipulator systems+ ===> Instead use
     Multiple manipulators
Two-port circuits
TWT+ ===> Instead use
     Traveling wave tubes
Typesetting
UHF amplifiers
UHF antennas
UHF attenuators
UHF bipolar integrated circuits
UHF bipolar transistor amplifiers
UHF bipolar transistor oscillators
UHF bipolar transistors
UHF circuits
UHF circulators
UHF communication
UHF couplers
UHF detectors
UHF devices
UHF diodes
UHF directional couplers
UHF FET amplifiers
UHF FET integrated circuits
UHF FET oscillators
UHF FETs
UHF filters
UHF frequency conversion
UHF generation
UHF integrated circuits
UHF isolators
UHF measurements
UHF mixers
UHF modulation
UHF oscillators
UHF phase shifters
UHF power amplifiers
UHF power bipolar transistor amplifiers
UHF power bipolar transistors
UHF power FET amplifiers
UHF power FETs
UHF propagation
UHF radiation effects+ ===> Instead use
     Electromagnetic radiation effects
```

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UHF radio communication
UHF radio propagation
UHF radio propagation meteorological factors
UHF radio propagation terrain factors
UHF radiometry
UHF receivers
UHF repeaters
UHF resonator filters
UHF resonators
UHF spectroscopy
UHF switches
UHF technology
UHF transistors
UHF transmitters
UHF tubes
UHF waveguides
UHV cables+ ===> Instead use
     UHV transmission lines
UHV circuit breakers
UHV insulation
UHV insulators
UHV measurements
UHV substations
UHV switches
UHV transformers
UHV transmission
UHV transmission lines
ULSI+ ===> Instead use
     Ultra-large-scale integration
Ultrafast electronics
Ultrafast optics
Ultrasonic applications+ ===> Instead use
     Acoustic applications
Ultrasonic devices+ ===> Instead use
     Acoustic devices
Ultrasonics+ ===> Instead use
     Acoustics
Ultraviolet detectors
Ultraviolet generation
Ultraviolet imaging
Ultraviolet lithography+ ===> Instead use
     Photolithography
Ultraviolet propagation+ ===> Instead use
     Optical propagation
Ultraviolet pulses+ ===> Instead use
     Optical pulses
Ultraviolet radiation effects
Ultraviolet radiometry
Ultraviolet spectroscopy
Ultra-high-frequency amplifiers+ ===> Instead use
     UHF amplifiers
Ultra-high-frequency antennas+ ===> Instead use
     UHF antennas
Ultra-high-frequency attenuators+ ===> Instead use
     UHF attenuators
Ultra-high-frequency bipolar integrated circuits+ ===> Instead use
     UHF bipolar integrated circuits
```

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Ultra-high-frequency bipolar transistor amplifiers+ ===> Instead use
     UHF bipolar transistor amplifiers
Ultra-high-frequency bipolar transistor oscillators+ ===> Instead use
     UHF bipolar transistor oscillators
Ultra-high-frequency bipolar transistors+ ===> Instead use
     UHF bipolar transistors
Ultra-high-frequency circuits+ ===> Instead use
     UHF circuits
Ultra-high-frequency circulators+ ===> Instead use
     UHF circulators
Ultra-high-frequency communication+ ===> Instead use
     UHF communication
Ultra-high-frequency couplers+ ===> Instead use
     UHF couplers
Ultra-high-frequency detectors+ ===> Instead use
     UHF detectors
Ultra-high-frequency devices+ ===> Instead use
     UHF devices
Ultra-high-frequency diodes+ ===> Instead use
     UHF diodes
Ultra-high-frequency directional couplers+ ===> Instead use
     UHF directional couplers
Ultra-high-frequency FET amplifiers+ ===> Instead use
     UHF FET amplifiers
Ultra-high-frequency FET integrated circuits+ ===> Instead use
     UHF FET integrated circuits
Ultra-high-frequency FET oscillators+ ===> Instead use
     UHF FET oscillators
Ultra-high-frequency FETs+ ===> Instead use
     UHF FETs
Ultra-high-frequency filters+ ===> Instead use
     UHF filters
Ultra-high-frequency frequency conversion+ ===> Instead use
     UHF frequency conversion
Ultra-high-frequency generation+ ===> Instead use
     UHF generation
Ultra-high-frequency integrated circuits+ ===> Instead use
     UHF integrated circuits
Ultra-high-frequency isolators+ ===> Instead use
     UHF isolators
Ultra-high-frequency measurements+ ===> Instead use
     UHF measurements
Ultra-high-frequency mixers+ ===> Instead use
     UHF mixers
Ultra-high-frequency modulation+ ===> Instead use
     UHF modulation
Ultra-high-frequency oscillators+ ===> Instead use
     UHF oscillators
Ultra-high-frequency phase shifters+ ===> Instead use
     UHF phase shifters
Ultra-high-frequency power amplifiers+ ===> Instead use
     UHF power amplifiers
Ultra-high-frequency power bipolar transistor amplifiers+ ===> Instead
use
     UHF power bipolar transistor amplifiers
Ultra-high-frequency power bipolar transistors+ ===> Instead use
     UHF power bipolar transistors
```

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Ultra-high-frequency power FET amplifiers+ ===> Instead use
     UHF power FET amplifiers
Ultra-high-frequency power FETs+ ===> Instead use
     UHF power FETs
Ultra-high-frequency propagation+ ===> Instead use
     UHF propagation
Ultra-high-frequency radiation effects+ ===> Instead use
     Electromagnetic radiation effects
Ultra-high-frequency radio communication+ ===> Instead use
     UHF radio communication
Ultra-high-frequency radio propagation+ ===> Instead use
     UHF radio propagation
Ultra-high-frequency radio propagation meteorological factors+ ===>
Instead use
     UHF radio propagation meteorological factors
Ultra-high-frequency radio propagation terrain factors+ ===> Instead
use
     UHF radio propagation terrain factors
Ultra-high-frequency radiometry+ ===> Instead use
     UHF radiometry
Ultra-high-frequency receivers+ ===> Instead use
     UHF receivers
Ultra-high-frequency repeaters+ ===> Instead use
     UHF repeaters
Ultra-high-frequency resonator filters+ ===> Instead use
     UHF resonator filters
Ultra-high-frequency resonators+ ===> Instead use
     UHF resonators
Ultra-high-frequency spectroscopy+ ===> Instead use
     UHF spectroscopy
Ultra-high-frequency switches+ ===> Instead use
     UHF switches
Ultra-high-frequency technology+ ===> Instead use
     UHF technology
Ultra-high-frequency transistors+ ===> Instead use
     UHF transistors
Ultra-high-frequency transmitters+ ===> Instead use
     UHF transmitters
Ultra-high-frequency tubes+ ===> Instead use
     UHF tubes
Ultra-high-frequency waveguides+ ===> Instead use
     UHF waveguides
Ultra-high-speed integrated circuits
Ultra-high-voltage circuit breakers+ ===> Instead use
     UHV circuit breakers
Ultra-high-voltage insulation+ ===> Instead use
     UHV insulation
Ultra-high-voltage insulators+ ===> Instead use
     UHV insulators
Ultra-high-voltage measurements+ ===> Instead use
     UHV measurements
Ultra-high-voltage substations+ ===> Instead use
     UHV substations
Ultra-high-voltage switches+ ===> Instead use
     UHV switches
Ultra-high-voltage transformers+ ===> Instead use
     UHV transformers
```

Ultra-high-voltage transmission+ ===> Instead use
     UHV transmission
Ultra-high-voltage transmission lines+ ===> Instead use
     UHV transmission lines
Ultra-large-scale integration
Umbrella antennas
Uncertain systems
Uncertainty
Underground antennas+ ===> Instead use
     Buried antennas
Underground communication cables+ ===> Instead use
     Wire communication cables
Underground electromagnetic propagation
Underground object detection+ ===> Instead use
     Buried object detection
Underground power distribution lines
Underground power transmission lines
Underwater acoustic arrays
Underwater acoustic communication
Underwater acoustic measurements
Underwater acoustic propagation
Underwater acoustic telemetry
Underwater acoustic transducers
Underwater acoustics
Underwater antennas
Underwater cables
Underwater communication
Underwater communication cables
Underwater electrical equipment
Underwater electromagnetic propagation+ ===> Instead use
     Underwater radio propagation
Underwater electronic equipment
Underwater equipment
Underwater object detection
Underwater optical communication
Underwater optical propagation
Underwater power cables
Underwater radio communication
Underwater radio propagation
Underwater structures
Underwater technology
Underwater vehicle communication
Underwater vehicle control
Underwater vehicle detection and tracking
Underwater vehicle electrical systems+ ===> Instead use
     Underwater vehicle power systems
Underwater vehicle electronics
Underwater vehicle maintenance
Underwater vehicle power systems
Underwater vehicle propulsion
Underwater vehicle reliability
Underwater vehicle testing
Underwater vehicles
Underwater work systems
Undulators
Unijunction transistors
Uninterruptible power systems

```
Unit commitment+ ===> Instead use
     Power generation dispatch
United States
Units (measurement)+ ===> Instead use
     Measurement units
Universal motors
Universal product codes+ ===> Instead use
     Bar codes
Universities+ ===> Instead use
     Education
Unsupervised learning
Uranium
Uranium alloys
Uranium compounds
Urban areas
Urinary system
US+ ===> Instead use
     United States
User centered design
          methodology" was used
User interface human factors
User interface management systems
User interfaces
User modeling
   SN   Use for modeling of, rather than by, user
Utility programs
Vacuum arcs
Vacuum breakdown
Vacuum circuit breakers
Vacuum contactors
Vacuum control
Vacuum insulation
Vacuum interrupters
Vacuum measurement
Vacuum microelectronics
Vacuum switches
Vacuum systems
Vacuum technology
Vacuum tubes+ ===> Instead use
     Electron tubes
Valves
Van de Graaff accelerators
Van der Pol oscillators+ ===> Instead use
     Nonlinear oscillators
Vanadium
Vanadium alloys
Vanadium compounds
Vapor deposition
VAR+ ===> Instead use
     Reactive power
Varactor tuners
Varactors
Variable length codes
Variable parameter circuits+ ===> Instead use
     Time-varying circuits
Variable rate codes
Variable speed drives
```

```
Variable structure systems
Variational methods
Varistors
Varnish insulation
VCG+ ===> Instead use
     Vectorcardiography
VCR+ ===> Instead use
     Video recording
Vector processing
Vector quantization
Vectorcardiography
Vectors
Vegetation
Vegetation mapping
Vehicles
Veins+ ===> Instead use
     Blood vessels
Velocity control
Velocity measurement
Ventilation
Vertex detectors
Vertical take-off and landing aircraft+ ===> Instead use
     Helicopters
Very-high-frequency amplifiers+ ===> Instead use
     VHF amplifiers
Very-high-frequency antennas+ ===> Instead use
     VHF antennas
Very-high-frequency circuits+ ===> Instead use
     VHF circuits
Very-high-frequency devices+ ===> Instead use
     VHF devices
Very-high-frequency filters+ ===> Instead use
     VHF filters
Very-high-frequency measurements+ ===> Instead use
     VHF measurements
Very-high-frequency oscillators+ ===> Instead use
     VHF oscillators
Very-high-frequency radiation effects+ ===> Instead use
     Electromagnetic radiation effects
Very-high-frequency radio communication+ ===> Instead use
     VHF radio communication
Very-high-frequency radio propagation+ ===> Instead use
     VHF radio propagation
Very-high-frequency radio propagation meteorological factoRS+ ===>
Instead use
     VHF radio propagation meteorological factors
Very-high-frequency radio propagation terrain factors+ ===> Instead use
     VHF radio propagation terrain factors
Very-high-frequency receivers+ ===> Instead use
     VHF receivers
Very-high-frequency repeaters+ ===> Instead use
     VHF repeaters
Very-high-frequency resonator filters+ ===> Instead use
     VHF resonator filters
Very-high-frequency resonators+ ===> Instead use
     VHF resonators
Very-high-frequency transmitters+ ===> Instead use
```

VHF transmitters
Very-high-speed integrated circuits
Very-large-scale integration
VHF amplifiers
VHF antennas
VHF circuits
VHF devices
VHF filters
VHF measurements
VHF oscillators
VHF radar
VHF radiation effects+ ===> Instead use
     Electromagnetic radiation effects
VHF radio communication
VHF radio propagation
VHF radio propagation meteorological factors
VHF radio propagation terrain factors
VHF receivers
VHF repeaters
VHF resonator filters
VHF resonators
VHF transmitters
VHSIC+ ===> Instead use
     Very-high-speed integrated circuits
Vibration control
Vibration measurement
Vibrations
Video+ ===> Instead use
     TV
Video cameras
Video codecs
Video coding
          processing" were used
Video equipment
Video games+ ===> Instead use
     Games
Video on demand+ ===> Instead use
     Interactive TV
Video recording
Video reviews
Video signal processing
Videoconferencing+ ===> Instead use
     Teleconferencing
Videophone systems
Videotex
Vidicons+ ===> Instead use
     TV cameras
Viewdata+ ===> Instead use
     Videotex
Virtual computers
Virtual memories
Virtual office+ ===> Instead use
     Teleworking
Virtual reality
Viruses (microorganisms)+ ===> Instead use
     Microorganisms
Viruses (computer)+ ===> Instead use

Computer viruses
Vision systems (nonbiological)+ ===> Instead use
          Machine vision
Visual evoked potentials+ ===> Instead use
          Bioelectric potentials
Visual instructional aids+ ===> Instead use
          Educational technology
Visual languages
Visual programming
               were used
Visual system
Visualization
Viterbi decoding
Viterbi detection
Viterbi estimation
VLSI+ ===> Instead use
          Very-large-scale integration
Vocal system
Vocoders
Voice+ ===> Instead use
          Vocal system
Voice mail
Voice response systems+ ===> Instead use
          Speech synthesis
Voltage
Voltage breakdown+ ===> Instead use
          Dielectric breakdown
Voltage collapse+ ===> Instead use
          Power system dynamic stability
Voltage control
Voltage controlled oscillators
Voltage dividers
Voltage measurement
Voltage multipliers
Voltage regulation+ ===> Instead use
          Voltage control
Voltage stability+ ===> Instead use
          Power system dynamic stability
Voltage transformers
Voltage-frequency conversion
Volterra filters+ ===> Instead use
          Nonlinear filters
Volterra integral equations
Volterra series
Voltmeters
Volume measurement
VSWR measurement+ ===> Instead use
          Standing wave measurements
VTOL aircraft+ ===> Instead use
          Helicopters
VTR+ ===> Instead use
          Video recording
Wafer bonding
Wafer-scale integration
Walsh analysis
Walsh filters
Warning systems+ ===> Instead use

```
      Alarm systems
Waste materials
Water
Water heating
Water pollution
Water resources
Water trees+ ===> Instead use
      Trees (insulation)
Watthour meters
Wattmeters
Wave diffraction+ ===> Instead use
      Diffraction
Wave digital filters
Wave equations+ ===> Instead use
      Propagation
Wave functions
Wave propagation+ ===> Instead use
      Propagation
Wave scattering+ ===> Instead use
      Scattering
Waveform analysis+ ===> Instead use
      Signal analysis
Waveform generators+ ===> Instead use
      Signal generators
Waveforms+ ===> Instead use
      Signals
Waveguide antennas
Waveguide arrays
Waveguide attenuators
Waveguide bends
Waveguide components
Waveguide couplers
Waveguide discontinuities
Waveguide excitation
Waveguide filters
Waveguide junctions
Waveguide mounts
Waveguide obstacles+ ===> Instead use
      Waveguide discontinuities
Waveguide switches
Waveguide theory
Waveguide transitions
Waveguides
Wavelength division multiplexing
Wavelength measurement
Wavelet transforms
Waves
   SN   Use only for treatment of general wave phenomena
WDM+ ===> Instead use
      Wavelength division multiplexing
Weapons
Wear
Weather+ ===> Instead use
      Meteorology
Weather forecasting
Wedges
Weibull distributions
```

```
Weight control
Weight measurement
Welding
Wheelchairs+ ===> Instead use
     Handicapped aids
Wheeling+ ===> Instead use
     Power system economics
White noise
Wide area networks
Wiener filtering
Wiener processes
Wiener-Hopf theory
Wiggler magnets+ ===> Instead use
     Undulators
Wigner distributions
Wind
Wind energy
Wind power generation
Wind tunnels
Winding wire+ ===> Instead use
     Magnet wire
Windings
Wire
Wire antennas
Wire chambers+ ===> Instead use
     Ionization chambers
Wire communication
Wire communication cables
Wire communication interference
Wire insulation
Wire scatterers
Wire telemetry+ ===> Instead use
     Telemetry
Wireless LAN
Wiring
Wood industry
Wood poles+ ===> Instead use
     Poles and towers
Word processing+ ===> Instead use
     Text processing
Work function
Workstation human factors
Workstations
Wound rotor motors+ ===> Instead use
     Induction motors
Write once memories
Writing
Xenon
Xerography+ ===> Instead use
     Electrophotography
XLPE insulation+ ===> Instead use
     Cross linked polyethylene insulation
X-ray angiocardiography
X-ray applications
X-ray astronomy
X-ray astronomy detectors
X-ray cardiography
```

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X-ray chemical analysis
X-ray chest imaging
X-ray detectors
X-ray effects
X-ray image sensors
X-ray imaging
X-ray lasers
X-ray lithography
X-ray measurements
X-ray production
X-ray scattering
X-ray spectroscopy
X-ray spectroscopy detectors
X-ray tomography
X-rays
YAG lasers
Yagi-Uda arrays
Yield estimation
Yield optimization
YIG filters
Ytterbium
Ytterbium alloys
Ytterbium compounds
Yttrium
Yttrium alloys
Yttrium compounds
Yttrium lasers
Z transforms
Zener diodes
Zero assignment
Zeros+ ===> Instead use
     Poles and zeros
Zero-crossing problems+ ===> Instead use
     Level-crossing problems
Zinc
Zinc alloys
Zinc compounds
Zirconium
Zirconium alloys
Zirconium compounds

--- End of 1998 IEEE Keywords List ---
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