

Recent IBM Patents

The following patents were recently issued by the countries in which the inventions were made.

Canada

1,100,538 P. J. Henderson

Method and Apparatus for Feeding Documents with Variable Driving Force

France

7,313,774 J. P. Alfonsi, P. Buffard, and

Call Control

G. Monteil

7,829,352 P. Vachee and J. Monrolin

Data Transmission Method and Devices

Germany

2,126,887

J. O. Heller

Multilayer Magnetic Structure and Methods of Making Same

2,232,189

K. N. Najmann, H. H. Berger,
H. G. Pietrass, and
S. K. Wiedmann

Monolithic Bipolar Transistor Storage Arrangement with Latent Bit Pattern

2,250,460

J. Schneider, A. Stoffel, and
G. Trippel

Magnetic Record Carriers

2,250,481

J. Schneider, A. Stoffel, and
G. Trippel

Manufacture of Magnetic Record Carriers

2,336,676

K. Kraft, G. Knauff, and
O. Koltschak

Data Processing Systems

2,458,736

G. W. Koetzle

Method and Arrangement for Supervising Power Supply Systems

2,556,833

K. Heuber, S. K. Wiedmann,
K. Najmann, and K. Klein

Read/Write Speed Up Circuit for Integrated Data Memories

2,638,799

D. Baehrle, F. Schwerdt, P. Frasch,
U. Thelen, W. G. Koenig, and
T. Vogtmann

Method of Improving the Adherence of Metallic Conductive Lines on Polyimide Layers

2,860,462,809

F. Wernicke

Highly Integrated Semiconductor Structure Providing a Diode-Resistor Circuit Configuration

United Kingdom

1,582,711

D. J. Barclay and A. E. Mitchell

Electroplating Chromium

1,583,105

D. J. Barclay and A. E. Mitchell

Electroplating Chromium

United States

4,251,803

P. Debord and J.-L. Marijon

Dynamic Zero Offset Compensating Circuit for A/D Converter

4,252,307

E. C. Korte

Sheet Feed and Transport

4,252,309

S. P. Garrison and
E. L. B. Kroeker

Document Sheet Flipper

4,252,418

D. J. Barclay, C. L. Bird,
D. H. Martin, and W. M. Morgan

Electrochromic Display Device

4,252,451

D. E. Clancy, C. F. Johnson,
W. R. McCray, and D. M. Neal

Print Point Reposition Feature for an Electronic Typewriter

4,252,579

I. T. Ho and J. Riseman

Method for Making Single Electrode U-MOSFET Random Access Memory Utilizing Reactive Ion Etching and Polycrystalline Deposition

4,252,581

N. G. Anantha, J. R. Cavaliere,
R. R. Konian, G. R. Srinivasan,
H. I. Stoller, and J. L. Walsh

Selective Epitaxy Method for Making Filamentary Pedestal Transistor

4,252,582

N. G. Anantha, H. S. Bhatia, and
J. L. Walsh

Self Aligned Method for Making Bipolar Transistor Having Minimum Base to Emitter Contact Spacing

4,253,186

D. N. Godard

Method and Device for Detecting a Pseudo-Random Sequence of Two Symbols in a Data Receiver Employing Double Sideband-Quadrature Carrier Modulation

4,253,392

F. Y. Brandon, J. P. Chang,
W. D. Clark, and E. G. Stahlberg

Hollow Fuser Roll with Variable Taper

4,253,775

W. Crooks and K. S. Pennington

Apparatus for Re-Inking a Ribbon in a Thermal Transfer Printing System

4,254,161

B. M. Kemlage

Prevention of Low Pressure Chemical Vapor Deposition Silicon Dioxide Undercutting and Flaking

4,254,186

M. A. Acitelli and J. T. Woods

Process for Preparing Epoxy Laminates for Additive Plating

4,254,428

G. C. Feth and S. K. Wiedmann

Self-Aligned Schottky Diode Structure and Method of Fabrication

4,254,431

R. Babuka, R. E. Heath,
G. J. Saxenmeyer, Jr., and
L. K. Schultz

Restorable Backbond for LSI Chips Using Liquid Metal Coated Dendrites

980

4,254,439

R. L. Fowler and T. L. Schneider

Facsimile Mid-Page Restart

4,254,445	C. W. Ho	Discretionary Fly Wire Chip Interconnection
4,255,042	J. D. Armitage, Jr., J. A. Barkley, R. B. Hooker III, and J. R. Walker	Light Pipe for Accurate Erasure of Photoconductor Charge
4,255,216	J. W. Conant, D. W. Fisher, and D. D. Fox	Pellicle Ring Removal Method and Tool
4,255,693	S. D. Keidl	Closed Loop Stepper Motor Circuitry Without Encoder
4,255,708	J. T. Wilson III	Magnetoresistive Position Transducer with Invariable Peak Signal
4,255,772	H. S. Perez and T. A. Schwarz	Read/Write Magnetic Head Assembly with Magnetoresistive Sensor
4,255,811	R. L. Adler	Key Controlled Block Cipher Cryptographic System
4,256,380	D. J. Barclay, A. C. Lowe, and D. H. Martin	Counter Electrode Arrangement of an Electrochromic Display Device
4,256,408	T. F. Shelton	Dot Matrix Print Head
4,256,514	H. B. Pogge	Method for Forming a Narrow Dimensioned Region on a Body
4,256,532	I. E. Magdo and S. Magdo	Method for Making a Silicon Mask
4,256,548	D. J. Barclay and J. M. L. Vigar	Elimination of Anode Hydrogen Cyanide Formation in Trivalent Chromium Plating
4,257,096	J. W. McCullough, T. A. Poland, D. N. Reynolds, K. K. Slack, and R. T. Turner	Synchronous and Conditional Inter-Program Control Apparatus for a Computer System
4,257,637	J. K. Hassan and J. A. Paivanas	Contactless Air Film Lifting Device
4,257,672	L. Balliet	Optical Coupler for Connecting a Light Source to an Optical Transmission Line
4,257,827	G. H. Schwuttke and K.-H. Yang	High Efficiency Gettering in Silicon Through Localized Superheated Melt Formation
4,257,904	L. C. Anderson	Dielectric Glass Coating Composition Containing Polymethylmethacrylate Fugative Binder
4,258,079	J. Economy, M. A. Flandera, and C.-Y. Liu	Preparation of Continuous Films of Diacetylenic Polymers
4,258,101	F. C. Hornbeck	Conductive Plastic with Metalized Glass Fibers Retained in Partial Clumps
4,258,146	R. D. Balanson, J. Economy, S. J. Huang, and T. L. Smith	Organic Fillers for Elastomers
4,258,361	A. F. Hydes and A. L. Jones	Display System Having Modified Screen Format or Layout
4,258,417	N. C. Berglund and D. A. Luick	System for Interfacing Between Main Store Memory and a Central Processor
4,258,418	C. A. Heath	Variable Capacity Data Buffer System
4,258,647	D. W. Pohl and H. Scheel	Apparatus for Manufacturing Multi-Layered Semiconductor Elements by Means of Liquid-Phase Epitaxy
4,259,061	D. J. Dubetsky	Method of Achieving Uniform Sintering Shrinkage in a Laminated Planar Green Ceramic Substrate and Apparatus Therefor
4,259,145	J. M. E. Harper and H. R. Kaufman	Ion Source for Reactive Ion Etching
4,259,366	P. S. Balasubramanian, C. L. Bertin, and S. B. Greenspan	Fabrication Method for Forming FET Gate Electrode
4,259,367	W. E. Dougherty, Jr.	Fine Line Repair Technique
4,259,369	B. J. Canavello and M. Hatzakis	Image Hardening Process
4,259,430	L. H. Kaplan and S. M. Zimmerman	Photoresist O-Quinone Diazide Containing Composition and Resist Mask Formation Process
4,259,574	T. W. Carr and H. A. Froot	Microanalysis by Pulse Laser Emission Spectroscopy
4,259,730	K. Heuber, E. Klink, V. Rudolph, and S. K. Wiedmann	IIIL with Partially Spaced Collars
4,259,903	K. Arendt, W. Hasler, and K.-H. Schaller	Circuit Arrangement for Synchronizing the Times of Occurrence of the Print Hammer Impact with the Arrival of the Print Type at the Print Position
4,260,073	G. W. Baumann	Virgin Toner and Used Toner Supply Apparatus and Method
4,260,210	R. Babuka, W. D. Emmons, R. L. Weiss, and P. Yacko	Pluggable Module Actuation and Retention Device
4,260,235	J. B. Stack	Contamination Prevention System
4,260,249	J. D. Armitage, Jr. and W. M. Routt, Jr.	Two Slit Illumination Aperture
4,260,259	J. P. Kirk	Metal Etch Rate Analyzer
4,260,451	A. F. Schmeckenbecher	Method of Reworking Substrates, and Solutions for Use Therein
4,260,879	M. J. Galatha, G. D. Rohrer, and J. J. Squires	Unit Record Reader
4,260,979	R. C. Smith	Apparatus for Sensing Non-Coded Images
4,260,996	A. L. Wittwer	Aspirated Ink Jet Printer Head
4,261,003	I. E. Magdo and S. Magdo	Integrated Circuit Structures with Full Dielectric Isolation and a Novel Method for Fabrication Thereof
4,261,039	G. N. Baker, J. E. Bateson, E. T. Brown, H. E. Delgado, L. R. Siegl, and D. C. Thomas, Jr.	Microprocessor Controlled Positioning System
4,261,045	T. W. Collins and K. B. Mehta	Magnetic Bubble Y-Bar Corner
4,261,095	R. F. Dreves, J. F. Fresia, S. U. Kim, and J. J. Lajza, Jr.	Self Aligned Schottky Guard Ring
4,261,584	K. P. Browne, B. T. Carr, and E. J. Romanski	Hermetic Seal
4,261,650	G. J. Sprokel	Method for Producing Uniform Parallel Alignment in Liquid Crystal Cells
4,261,681	G. A. Gates	Article Transfer Apparatus
4,261,698	T. W. Carr, C. D. Needham, and E. C. Spaulding	Trace Oxygen Detector

- 4,261,781 H. D. Edmonds, V. J. Lyons, and G. Markovits
- 4,262,275 J. L. DeMarco, E. W. Kunkler, and R. J. Wolff
- 4,262,316 K. Hartmann and H. Matthaei
- 4,262,330 N. C. Berglund, R. D. Crowley, W. G. Kempke, and W. C. Richardson
- 4,262,331 J. W. Freeland, J. E. Gaffney, Jr., and I. L. Isert
- 4,262,332 W. E. Bass and K. G. Beaman
- 4,262,356 A. Lautier and J. L. Monrolin
- 4,262,360 F. Bigo and F. Caron
- 4,263,518 D. Ballatore, F. Delaporte, G. Lebesnerais, and J.-P. Nuez
- 4,263,534 W. J. Martin and B. G. Kleen
- 4,263,629 M. R. Hatch
- 4,263,630 D. L. Pierson
- 4,263,634 R. D. Chenoweth and D. J. Smith
- 4,263,651 W. E. Donath and R. B. Hitchcock, Sr.
- 4,263,662 G. E. Keefe and E. W. Pugh
- 4,263,669 D. E. Staiger
- 4,263,965 M. S. Mansuria and C. D. Ostergren
- 4,264,187 J. H. Rhodes, Jr.
- 4,264,220 S. A. Okcuoglu
- 4,264,221 A. B. Habich and R. E. Hunt
- 4,264,223 J. D. Bemis, R. V. D. Firth III, W. Goff, Jr., and R. T. Stone, Jr.
- 4,264,224 R. D. Mathews
- 4,264,225 J. N. Cassell, J. A. Elder, Jr., B. G. Pastrick, and W. J. Thornhill
- 4,264,226 D. J. Bowles, D. E. Clancy, C. F. Johnson, and D. M. Neal
- 4,264,374 K. D. Beyer and R. H. Kastl
- 4,264,382 N. G. Anantha, H. S. Bhatia, S. P. Caur, and H. B. Pogge
- 4,264,409 L. E. Forget, R. A. Gdula, and J. C. Hollis
- 4,264,693 B. A. Gardineer, C. J. Sambucetti, and H. K. Seitz
- 4,264,782 A. G. Konheim
- 4,264,807 D. N. Moen and G. C. Thomas
- 4,264,813 G. V. Chandrashekhar, P. Chaudhari, J. J. Cuomo, R. J. Gambino, and J. M. E. Harper
- 4,264,832 A. Furman
- 4,264,857 C. G. Jambotkar
- 4,264,877 D. R. Grischkowsky, R. T. Hodgson, and P. P. Sorokin
- 4,264,921 K. S. Pennington, E. S. Schlig, and J. M. White
- 4,264,930 J. M. White
- 4,264,974 W. G. Crouse
- 4,265,543 D. J. Barclay and C. T. Prowting
- 4,265,552 J. D. Bemis and W. Goff, Jr.
- 4,265,554 D. E. Clancy, C. F. Johnson, W. R. McCray, and D. M. Neal
- 4,265,556 M. L. Krieg and P. A. Quinn, Jr.
- 4,265,775 N. G. Aakalu and L. A. Rittmiller
- 4,265,998 J. A. Barkley
- 4,266,231 G. A. Drago, A. L. Mix, Jr., and R. T. Ritchie
- 4,266,232 A. Juliana, Jr., R. W. Koepcke, R. N. Mills, and F. E. Talke
- 4,266,271 M. E. Chamoff, I. L. Miller, and D. L. Thorson
- 4,266,272 N. C. Berglund and W. C. Kempke
- 4,266,282 R. A. Henle and A. H. Johnson
- 4,266,880 J. C. Buchanan
- Process for Forming Compound Semiconductor Bodies
- Hall Effect Apparatus for Flux Concentrator Assembly Therefor
- Record Storage Apparatus
- I-Phase Controls for a Computer
- Self-Adaptive Computer Load Control
- Command Pair to Improve Performance and Device Independence
- Method and System for Synchronizing a TDMA Communication
- Network Comprising a Satellite Equipped with Several Directional Beam
- Antennas Transmitting Signals at Various Frequencies
- Method and Device for Detecting a Pseudo-Random Sequence of Carrier
- Phase Changes of 0° and 180° in a Data Receiver
- Arrangement for Correcting the Voltage Coefficient of Resistance of
- Resistors Integral with a Semiconductor Body
- Single Sided Sustain Voltage Generator
- Disk File with Symmetrical Hollow Base
- Uniformly Loaded Opposite Magnetic Transducer Assembly
- Magnetic Disk-Jacket Assembly
- Method for Determining the Characteristics of a Logic Block Graph
- Diagram to Provide an Indication of Path Delays Between the Blocks
- Guard Rail for Contiguous Element Bubble Chips
- Pattern Generation System
- Leaved Thermal Cooling Module
- Document Handler
- Printwheel Homing Apparatus
- Print Element Cartridge
- Reversible Ribbon Cartridge for a High Speed Impact Printer
- Off-the-Carrier Ribbon Feed and Drive on a High Speed Movable-Carrier
- Impact Printer
- Bounce Dampening System for Switch Actuators
- Relocate Feature for an Electronic Typewriter
- Cleaning Process for P-Type Silicon Surface
- Method for Making a Lateral PNP or NPN with a High Gain Utilizing
- Reactive Ion Etching of Buried High Conductivity Regions
- Contamination-Free Selective Reactive Ion Etching or Polycrystalline
- Silicon Against Silicon Dioxide
- Light and Current Sensitive Film and Print-Display System Therewith
- Method and Apparatus for Transaction and Identity Verification
- Counter Including Two 2 Bit Counter Segments Connected in Cascade
- Each Counting in Gray Code
- High Intensity Ion Source Using Ionic Conductors
- Feedback Amplifier
- Constant Voltage Threshold Device
- Apparatus for Producing Tunable Intense Coherent Radiation in the
- Vicinity 628 cm⁻¹
- Apparatus for Color or Panchromatic Imaging
- Charge Coupled Device Incorporating Laplacian Thresholding with TDI
- Array
- Optimized Digital Delta Modulation Compander Having Truncation
- Effect Error Recovery
- Kerr Effect Apparatus
- Ribbon Drive Mechanism for High Speed Printer
- Paragraph Indent
- Apparatus for Setting Proportional Margins Based Upon the Width of a
- Scanned Sheet of Paper
- Non-Bleeding Thixotropic Thermally Conductive Material
- Electrophotographic Photoreceptive Background Areas Cleaned by
- Backcharge Process
- Ink Jet with Retractable Electrode and Secondary Ink Catcher
- Voltage Modulated Drop-on-Demand Ink Jet Method and Apparatus
- Reconfigurable Cluster of Data-Entry Terminals
- Transient Microcode Block Check Word Generation Control Circuitry
- Vertical Semiconductor Integrated Circuit Chip Packaging
- Paper Insertion Apparatus

4,267,259	H. Bohlen, J. Greschner, W. Külcke, and P. Nehmiz	Exposure Process
4,267,407	H. R. Schindler and P. Vettiger	Method and Apparatus for the Transmission of Speech Signals
4,267,465	W. Haug, J. Gschwendtner, and R. Schnadt	Circuit for Recharging the Output Nodes of Field Effect Transistor Circuits
4,267,555	C. E. Boyd, J. C. Jones, and J. L. Mumola	Rotatable Raster Scan Display
4,267,823	A. Bohg and M. Briska	Solar Collector with Lens Array
4,268,100	D. H. Kekas, R. P. McAdams, and A. Polischuk-Sawtschenko	Pivotally Mounted Printed Circuit Board Holder
4,268,113	F. E. Noel, Jr.	Signal Coupling Element for Substrate-Mounted Optical Transducers
4,268,165	P. J. Bradmon	Apparatus and Method for Controlling the Adjustment of Optical Elements in an Electrophotographic Apparatus
4,268,368	A. Aviram, K. S. Pennington, and L. Kuhn	Electrophoretical Method for Selectively Reinking Resistive Ribbon Thermal Transfer Printing Ribbons
4,268,584	K. Y. Ahn, C. H. Bajorek, P. S. Ho, R. J. Miller, and J. V. Powers	Nickel-X/Gold/Nickel-X Conductors for Solid State Devices Where X is Phosphorus, Boron, or Carbon
4,268,879	R. B. Watrous	Suspension for Air Bearing Head Arm Assembly
4,268,902	N. C. Berglund and J. R. Nieling	Maintenance Interface for a Service Processor-Central Processing Unit Computer System
4,268,906	D. G. Bourke, R. N. Mendelson, and L. Madruga	Data Processor Input/Output Controller
4,268,908	J. C. Logue and W.-W. Wu	Modular Macroprocessing System Comprising a Microprocessor and an Extendable Number of Programmed Logic Arrays