

Recent IBM Patents

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

Germany

1,574,651 S. Wiedmann
1,946,816 M. Krautwald
2,048,473 P. Skuin, J. Hajdu, G. Knauff and E. Vogt
2,131,939 U. Baitinger and W. Haug
2,245,284 A. Blum, L. Reichl, H. H. Lampe, G. Sonntag, C. Mohr, P. Rudolph, W. Schmidt and F. Irro
2,307,893 W. Reichert

Monolithic Circuit with Pinch Resistor
Printer with Several Print Slots Coordinated with Print Hammers
Electronic Data Processing System

Logic Controlled Inverter Stage
Data Processing Installation

Pressure Apparatus for a Printing Machine

United Kingdom

1,393,920 D. R. Page

Improvements in Electric Digital Data Processing Systems

United States

3,885,872 J. J. Howe, Jr. and J. C. Yarrington
3,885,877 R. S. Horwath and G. S. Kolb
3,886,000 R. L. Bratter and A. K. Gaid
3,886,025 J. Riseman
3,886,325 G. N. Gaebelein, D. J. Kostuch and M. E. Varner
3,886,343 P. M. Desautels and L. P. Remsen
3,886,382 R. G. Cain
3,886,421 J. K. Hassan, C. V. Rabstejnek and A. D. Wutka
3,886,468 R. H. Kruggel
3,886,525 P. J. Brown and R. M. Smith
3,886,564 H. E. Naylor III and R. A. Williams
3,886,569 J. S. Basi and J. S. Sandhu
3,887,055 B. G. Pastrick
3,887,106 P. M. Charlson, C. D. Green, W. J. Harris and K. E. Inman
3,887,261 E. A. Spiller
3,887,362 M. Ronay
3,887,366 R. B. Champ and M. D. Shattuck
3,887,379 N. J. Clecak and R. J. Cox
3,887,451 J. J. Cuomo, A. F. Mayadas, R. Rosenberg and V. Sadagopan
3,887,726 R. L. Bratter and A. K. Gaid
3,887,944 C. H. Bajorek and D. J. Thompson
3,887,945 D. A. Nepela and R. I. Potter
3,887,994 S. Ku and C. A. Pillus
3,889,169 J. A. Hirschman and H. E. Van Winkle
3,889,188 D. C. Trindade
3,889,241 V. A. Cordi and C. S. Gurski
3,889,243 E. G. Drimak
3,889,355 J. Aronstein and W. E. Harding
3,889,632 R. H. Brunner and W. C. Lester
3,890,418 T. A. Raczek
3,890,455 D. F. Ballas, S. Ku and J. C. Marinace

Digital Proximity Sensing System
Electro-Optical Fine Alignment Process
Method for Controlling Dielectric Isolation of a Semiconductor Device
Ferrite Head
Formatting for Record-Controlled Machines

Polyphase Arc Stripper
Balanced Superconductive Transmission Line Using Josephson Tunneling Devices
Precision Tool and Workpiece Positioning Apparatus with Ringout Detection
High Gain Amplifier
Shared Data Controlled by a Plurality of Users
Deflection Sensors for Ink Jet Printers
Simultaneous Double Diffusion into a Semiconductor Substrate
Card Holder
Ticket Cartridge and Hopper Stacker Therefor

Low-Loss Reflection Coatings Using Absorbing Materials
Nitridable Steels for Cold Flow Processes
Cyanine Pigments in Electrophotographic Processes
Photoresist Azide Sensitizer Composition
Method for Sputtering Garnet Compound Layer

Method of Chemical-Vapor Deposition to Provide Silicon Dioxide Films with Reduced Surface State Charge on Semiconductor Substrates
Method for Eliminating Part of Magnetic Crosstalk in Magnetoresistive Sensors
Head Assembly for Recording and Reading, Employing Inductive and Magnetoresistive Elements
Method of Manufacturing a Semiconductor Device
Position and Velocity Control for Motor Controlled Article Carrier and Handler
Time Zero Determination of FET Reliability
Shift Register Buffer Apparatus
Stack Mechanism for a Data Processor
Continuous Processing System
Variable Incidence Drive for Deposition Tooling
Skinning Process for Expansion Casting of Polymeric Foams
Method of Electrolessly Plating Alloys

3,890,460	L. C. Haas and L. P. West	Communications Enabling Method and Apparatus
3,890,472	D. E. Fisk and M. E. Homan	Transparent Time-Division Pulse-Multiplex Digital Electric Signal Switching Circuit Arrangement
3,890,572	A. E. Desblache and J. M. Pierret	Method and Apparatus for Equalizing Phase-Modulated Signals
3,890,603	J. W. Jones, J. F. Sears and K. G. Taylor	Associative Store
3,890,605	J. C. Slonczewski	Magnetic Domain Systems Using Domains Having Different Properties
3,891,864	P. L. Gueret	Josephson Junction Logic Element
3,892,304	I. D. Shakib	Single Print Element Print Carrier with Self-Contained Selection Function
3,892,606	R. E. Chappelow, D. A. Doney, J. Doulin, P. T. Lin and F. A. Schiavone	Method for Forming Silicon Conductive Layers Utilizing Differential Etching Rates
3,892,646	D. J. Lazzarini and L. K. Schultz	Process for Selectively Forming Electrophoretic Coatings on Electrical Contacts Insulation for ACS Signal Overlay Strip Lines
3,892,650	J. J. Cuomo and W. W. Molzen, Jr.	Chemical Sputtering Purification Process
3,892,925	D. E. Fisk, M. E. Homan, C. L. Meiley, Z. D. Reynolds, R. V. Watkins and F. S. Wiedmer	Electric Signal Exchange Switching Arrangement
3,892,953	H. Nussbaumer	Digital Filter
3,892,979	R. T. Hodgson, J. R. Lankard, P. P. Sorokin and J. J. Wynne	Tunable Infrared/Ultraviolet Laser
3,892,998	F. Tsui and K. Tsui	Gas Discharge Device for Multicolor Information Display
3,893,044	W. P. Dumke and J. M. Woodall	Laser Device Having Enclosed Laser Cavity
3,893,070	D. C. Bossen, V. A. Cordi, M. Hsiao, B. N. Shiffrin and E. W. Glick	Error Correction and Detection Circuit with Modular Coding Unit
3,893,071	D. C. Bossen, M. Hsiao and A. M. Patel	Multilevel Error Correction System for High Density Memory
3,893,080	A. P. Ho and H. Lee	Minutiae Recognition System
3,893,085	A. A. Hansen	Read Mostly Memory Cell Having Bipolar and Famos Transistor
3,893,089	G. S. Almasi and G. E. Keefe	Two-Phase Propagation of Cylindrical Magnetic Domains
3,893,156	J. Riseman	Beam-Lead Integrated Circuit Structure and Method for Making the Same Including Automatic Registration of Beam-Leads with Corresponding Dielectric Substrate Leads
3,893,171	J. W. Marshall, E. G. McDonald, Jr. and P. B. Roath	Signal Adjustment Circuit
3,893,176	D. W. Jones	Means and Method of Tape Guide Control with Tape Skew and Lateral Displacement Corrections in a Rotary Head Drum
3,893,232	A. T. M. Fletcher and R. J. Godsoe	Electronic Component Assembly Apparatus
3,893,561	J. G. Gibbons and R. M. Marowski	Half Backspace for Dual Pitch Typewriter
3,893,623	R. A. Toupin	Fluid Jet Deflection by Modulation and Coanda Selection
3,894,271	H. C. Pfeiffer and O.C. Woodard	Method and Apparatus for Aligning Electron Beams
3,894,514	A. H. Caudill, R. J. Hoekzema and C. C. Wilson	Toner Recovery System
3,894,891	I. E. Magdo and S. Magdo	Method for Making a Space Charge Limited Transistor Having Recessed Dielectric Isolation
3,894,970	G. M. Adams, D. I. Crowley and K. H. Larson	Method of Preparing High Temperature Stable Gamma Iron Oxide
3,895,147	K. Y. Ahn and F. P. Laming	Fabrication Mask Using Divalent Rare Earth Element
3,895,237	J. D. Harr	Peak Detector
3,895,357	A. A. Schwartz and J. R. Stewart	Buffer Memory Arrangement for a Digital Television Display System
3,895,373	M. J. Freiser and D. T. Teaney	Method and Apparatus for Selectively Exciting a Matrix of Voltage Responsive Devices
3,895,388	V. W. T. Townsend	Adaptive Illuminator
3,896,317	C. N. Alcorn, R. J. DeFelippi, J. D. Henke and R. N. Liang	Integrated Monolithic Switch for High Voltage Applications
3,896,482	G. E. Brechling and J. J. Montren	Dynamic MOSFET Layout Technique
3,897,148	R. T. Ritchie and J. C. Rogers	Optical Scanning System
3,897,626	W. F. Beausoleil	Method of Manufacturing a Full Capacity Monolithic Memory Utilizing Defective Storage Cells
3,897,865	D. P. Darwin, B. M. Griffing and H. S. Kiel	Dot Printing Apparatus
3,898,084	R. B. Champ and M. D. Shattuck	Electrophotographic Processes Using Diazo Pigments
3,898,350	E. Gipstein and W. A. Hewett	Terpolymers for Electron Beam Positive Resists
3,898,351	R. E. Kennison and W. J. Stetson	Substrate Cleaning Process
3,898,360	E. W. Neumann and W. C. Thomas	Direct Inking Platen
3,898,432	M. C. Agnew, J. E. Savage and T. O. Turner	Read/Write Machine for Magnetic Stripped Document Card
3,898,444	V. A. Cordi and C. S. Gurski	Binary Counter with Error Detection and Transient Error Correction
3,898,569	J. K. Radcliffe	Transmission Line Current Transformer

3,898,585	P. F. Heidrich and P. S. Zory, Jr.	Leaky Corrugated Optical Waveguide Device
3,898,623	R. L. Cormier	Suspension and Restart of Input/Output Operations
3,898,627	R. W. Hooker and R. R. Schomburg	Optical Printer Having Serializing Buffer for Use with Variable Binary Words
3,898,630	A. A. Hansen and R. D. Lane	High Voltage Integrated Driver Circuit
3,898,631	E. C. Brown, G. R. Heinberg, A. L. Henry, R. E. Mahoney, R. M. Unterberger and T. R. Wright	Storage Indicator
3,898,635	R. W. Kulterman	Position Measuring Transformer
3,898,673	J. W. Haskell	Phase Control for Ink Jet Printer
3,899,240	D. Gabor	Method for Distinguishing Similar Subjects Using Discriminating Holograms
3,899,339	H. G. Peters, Jr. and P. W. H. Schuessler	Water Soluble Solder Resist
3,899,363	R. H. Dennard, V. L. Rideout and E. J. Walker	Method and Device for Reducing Sidewall Conduction in Recessed Oxide FET Arrays
3,899,369	D. R. Craig, G. M. Lederle and F. T. Plante	Process for the Production of Magnetic Materials Having Selective Circuitry by Using Selected DC Magnetic Fields
3,899,372	R. P. Esch and P. C. Huang	Process for Controlling Insulating Film Thickness Across a Semiconductor Wafer
3,899,373	I. Antipov	Method for Forming a Field Effect Device
3,899,554	H. D. Kaiser and R. W. Nufer	Process for Forming a Ceramic Substrate
3,899,642	I. Jones, H. R. Mueller, D. Wild and P. A. Zafropulo	Method of Distributing Tone and Alerting Signals in a TDM Communication System
3,899,699	B. M. Griffing	Brushless Linear DC Motor Actuator
3,899,753	S. D. Malaviya	Controlled High Frequency Transistor Crystal Oscillator
3,899,777	E. Feicht, W. O. Haug, R. Remshardt and H. Schettler	Means for Equalizing Line Potential When the Connecting Switch is Open
3,899,779	A. P. Malozemoff	Magnetic Bubble Domain System Using Different Types of Domains
3,900,162	D. E. Titus and S. Tsao	Method and Apparatus for Generation of Multiple Uniform Fluid Filaments
3,900,192	D. K. Gibson	Sheet Feeding Apparatus
3,900,337	W. Beck, F. C. Brunner, P. V. Frasch, B. Vancic, F. W. Schwerdt and T. Vogtmann	Method for Stripping Layers of Organic Material
3,900,344	I. E. Magdo	Novel Integratable Schottky Barrier Structure and Method for the Fabrication Thereof
3,900,352	M. Potter	Isolated Fixed and Variable Threshold Field Effect Transistor Fabrication Technique
3,900,600	E. C. Spaulding	Paraxylylene-Silane Dielectric Films
3,900,736	M. S. Michail, O. C. Woodard and H. S. Yourke	Method and Apparatus for Positioning a Beam of Charged Particles
3,900,746	W. R. Kraft and R. P. Lowden	Voltage Level Conversion Circuit
3,900,836	G. P. Salvo	Interleaved Memory Control Signal Handling Apparatus Using Pipelining Techniques
3,900,838	S. K. Wiedmann	Hybrid Storage Circuit
3,900,891	D. E. Griffiths, C. H. Kalthoff and E. C. Laenen	Rotating Head Mandrel with Cam Surface
3,900,894	R. A. Aziz	Write-Erase Circuits for Rotating Head Digital Magnetic Recorders
3,901,814	D. E. Davis, M. A. Habegger, R. D. Moore, E. V. Weber and O. C. Woodard	Method and Apparatus for Detecting a Registration Mark on a Target Such as a Semiconductor Wafer
3,902,012	J. J. Dalton and N. M. Poley	Color Deformographic Storage Target
3,902,048	J. M. Fleischer and D. H. McMurtry	Omnidirectional Optomechanical Scanning Apparatus
3,902,055	M. J. Haims, H. T. Hao, G. Libizay and A. Weiss	Binary Adder Circuit
3,902,116	R. S. Palmer	Quadrature Electronic Tachometer
3,902,129	W. A. Boothroyd	Demodulating Circuitry for Pulse Rate Modulation Data Reproduction
3,902,164	W. J. Kelley and L. E. Larson	Method and Means for Reducing the Amount of Address Translation in a Virtual Memory Data Processing System
3,902,192	E. G. Laenen and M. E. Prah	Cam Surface Mandrel with Air Bearing Support
3,903,324	T. F. Gukelberger, Jr. and W. J. Kleinfelder	Method of Changing the Physical Properties of a Metallic Film by Ion Beam Formation
3,903,328	E. R. Burdette, Jr., D. D. Dean and W. L. Mitchell	Conductive Coating
3,903,364	E. G. Lean	High Resolution Line Scanner
3,903,516	N. R. Mauro, Jr.	Control Logic for Gas Discharge Display Panel
3,904,148	S. P. Cloud, C. H. Kalthoff, W. J. Rueger and T. W. Thompson	Control for Self-Threading Tape in a Helical Path

3,904,404	J. C. Suits	Rhodium and Ruthenium Compositions
3,904,426	R. G. Frieser, J. L. Powell and R. R. Tummala	Process for Manufacturing Low Temperature Sealing Glasses
3,904,454	I. E. Magdo and S. Magdo	Method for Fabricating Minute Openings in Integrated Circuits
3,904,492	D. W. Rich, M. C. Smith and M. Zipay	Dual Resist Usage in Construction of Apertured Multilayer Printed Circuit Articles
3,904,824	E. S. Caragliano and H. H. Nick	Automatic Gain Control for Encoded Data
3,904,886	T. P. Ehling, A. Plaza and A. E. Ruehli	Voltage Distribution Systems for Integrated Circuits
3,904,889	H. C. Hamel	Superconductive Logic Circuit Utilizing Josephson Tunnelling Devices
3,904,945	J. K. Hassan and C. V. Rabstejnek	Precision Tool and Workpiece Positioning Apparatus
3,904,951	J. E. Gersbach	Emitter Coupled Logic Current Reference Source
3,904,977	R. H. Barsotti	Multiplexing Switch with Bandpass Characteristics and High Isolation Impedance Between Inputs
3,905,025	M. I. Davis, J. M. Loffredo, P. L. Rickard and L. E. Wise	Data Acquisition and Control System Including Dynamic Interrupt Capability
3,905,841	A. Simonetti	Method of Improving Dispersability of Small Metallic Magnetic Particles in Organic Resin Binders
3,906,141	C. W. Anderson, D. O. Castrodale and J. T. Martin	Printing System
3,906,153	A. P. Polischuk-Sawtchenko	Remote Synchronous Loop Operation Over Half-Duplex Communications Link
3,906,218	H. J. Nussbaumer	Digital Filters
3,906,254	R. D. Lane and R. A. Manning	Complementary FET Pulse Level Converter
3,906,432	E. A. Ash	Grating Guides for Acoustic Surface Waves
3,906,468	O. Voegeli	Semicircular Magnetic Domain Propagation Apparatus
3,906,480	A. A. Schwartz and J. R. Stewart	Digital Television Display System Employing Coded Vector Graphics
3,906,485	S. J. Hong and D. L. Ostapko	Four Waveform Codes and Method of Analyses and Synthesis
3,906,538	J. Matisoo and H. H. Zappe	Techniques for Minimizing Resonance Amplitudes of Josephson Junction
3,906,649	D. W. Schaefer and J. W. Woods	Dimensionally Stable Film Mounting
3,907,091	J. H. Meier and J. W. Raider	Type Disc-Interposer Assembly for a Printer
3,907,429	L. Kuhn, R. A. Myers, K. S. Pennington and B. R. Shah	Method and Device for Detecting the Velocity of Droplets Formed from a Liquid Stream
3,908,155	D. W. Skinner	Wafer Circuit Package
3,908,194	L. T. Romankiw	Integrated Magnetoresistive Read, Inductive Write Batch Fabricated Magnetic Head
3,908,809	H. S. Beattie	High Speed Printer
3,908,896	J. L. Monrolin	Digital Resolver Filter and Receiver Using Same
3,908,925	H. O. Rinkleib and W. J. Rueger	Tape Cassette Opener
3,908,986	C. D. Bleau	Sheet Aligning Mechanism
3,909,094	T. R. Gardner	Gas Panel Construction
3,909,629	P. T. Marino	H-Configured Integration Circuits with Particular Squelch Circuit
3,909,630	B. C. Fiorino and P. T. Marino	High-Rate Integration, Squelch, and Phase Measurements
3,909,634	G. A. Maley and J. L. Walsh	Three State Latch
3,909,637	J. A. Dorler	Cross-Coupled Capacitor for AC Performance Tuning
3,909,678	A. A. Rifkin and R. W. Staats	Packaging Structure for a Plurality of Wafer Type Integrated Circuit Elements
3,909,702	B. E. Hart	Switching Voltage Regulator with Optical Coupling
3,909,787	G. J. Laurer and E. A. Moore	Candidate Selection Processor
3,909,791	J. W. Van den Berg	Selectively Settable Frequency Divider
3,909,803	W. F. Bankowski, Jr., V. R. Kumar, W. McGovern and J. D. Tartamella	Multi-Phase CCD Shift Register Optical Sensor with High Resolution
3,909,808	W. H. Cochran, D. A. Heuer and M. J. Sheehan	Minimum Pitch MOSFET Decoder Circuit Configuration