

Recent IBM patents

The following patents were recently issued by the countries in which the inventions were made. For U.S. patents, titles and names supplied to us by the U.S. Patent Office are reproduced exactly as they appear on the original published patent.

Federal Republic of Germany

3,685,117,508	G. Kaufholz, H. R. Schwermer, and J. Maergner	Device and Method of Extending the Instruction Set and the Functions of a Computer
---------------	---	--

France

258,514	J. Calvignac and P. Secondo	Optimized Bandwidth Allocation Mechanism Between Circuit Slots and Packet Bit Stream in a Communication Network
265,574	A. Gach, J. Dugre, and M. Costes	Circuit for Improving the Operations of Plurality of Processing Units Connected to a Bus in a Daisy Chain Configuration
313,706	C. Jacquart and M. Ferry	Analog to Digital and Digital to Analog Conversion System and Echo Cancellation Device Including the Same

Japan

1,650,910	J. A. Aiken	Volume Recovery System for Data Set in Wordprocessing System
1,650,911	J. A. Aiken	Volume Recovery System
1,650,912	K. Yonemochi, T. Suzuki, and T. Yanagi	Keyboard Interface System
1,650,968	T. Tsutsumi	English-Japanese Machine Translation System

Sweden

466,029	E. B. Hedin, G. Jonsson, J. E. Olsson, M. Sanamrad, and S. Westling	Natural Language Analyzing Apparatus and Method
---------	---	---

United Kingdom

344,366	G. Dixon and M. H. Bosier	Magnetic Head/Support Assembly and Access Mechanism for a Disk File
2,017,597	K. Yamazaki and T. J. Rodd	Flat Panel Display

United States

5,028,984	J. G. Ameen, J. Funari, B. G. Sammakia, D. W. Sissenstein, and S. L. Smey	Epoxy Composition and Use Thereof
5,086,401	E. Glassman, W. A. Hanson, P. Kazanzides, B. D. Mittelstadt, B. L. Musits, H. A. Paul, and R. H. Taylor	Image-Directed Robotic System for Precise Robotic Surgery Including Redundant Consistency Checking

©Copyright 1992 by International Business Machines Corporation.

321

5,086,478	W. L. Kelly-Mahaffey and J. M. Stafford	Finding Fiducials on Printed Circuit Boards to Sub Pixel Accuracy
5,086,495	M. A. Gray, A. R. Halbert, and S. J. Todd	Solid Modelling System With Logic to Discard Redundant Primitives
5,086,503	C. Y. Chung, R. G. Keen, O. Raymond, J. W. Snyder, and D. A. Tohlern	Methods of Remapping a Keyboard Within a Computer System
5,086,558	G. W. Grube and I. Y. Khandros	Direct Attachment of Semiconductor Chips to a Substrate with a Substrate with a Thermoplastic Interposer
5,087,537	J. F. Conway, E. C. Fredericks, and G. G. Via	Lithography Imaging Tool and Related Photolithographic Processes
5,087,867	R. W. Kruppa	Motor Driving Apparatus and Printer
5,088,006	S. E. del Puerto and P. M. Gaschke	Liquid Film Interface Cooling System for Semiconductor Wafer Processing
5,088,026	G. P. Bozman, G. Eisenberger, A. S. Lett, J. J. Myers, W. H. Tetzlaff, and J. H. Unger	Method for Managing a Data Cache Using Virtual External Storage Addresses as Arguments
5,089,440	F. R. Christie, K. I. Papathomas, and D. W. Wang	Solder Interconnection Structure and Process for Making
5,089,724	C.-T. K. Chuang and D. D. Tang	High-Speed Low-Power ECL/NTL Circuits with AC-Coupled Complementary Push-Pull Output Stage
5,089,725	P. Mollier, J.-P. Nuez, and P. Tannhof	Self-Referenced Current Switch Logic Circuit with a Push-Pull Output Buffer
5,089,726	B. A. Chappell, T. I. Chappell, and S. E. Schuster	Fast Cycle Time Clocked Amplifier
5,089,913	R. N. Singh and J. S. Wilczynski	High Resolution Reduction Catadioptric Relay Lens
5,089,947	C. D. Driscoll, R. S. Jungling, and E. M. Najm	Power Supply Circuit Featuring Minimum Parts Count
5,089,952	G. P. Bozman	Method for Allowing Weak Searchers to Access Pointer-Connected Data Structures Without Looking
5,089,956	M. G. MacPhail	Method of Distributing Related Documents to Identified End Users in an Information Processing System
5,089,985	P. Y. Chang, D. J. Coyle, Jr., T. R. Malkemus, R. A. Rodriguez, and P. J. Welti	System and Method for Performing a Sort Operation in a Relational Database Manager to Pass Results Directly to a User Without Writing to Disk
5,090,002	W. W. Chow, A. A. Fennema, I. E. Henderson, and R. J. Kadlec	Positioning Systems Employing Velocity and Position Control Loops with Position Control Loop Having an Extended Range
5,091,070	B. Bauer and W. W. Erlmann	Method of Continuously Removing and Obtaining Ethylene Diamine Tetracetic Acid (EDTA) from the Process Water of Electroless Copper Plating
5,091,289	J. E. Cronin, C. W. Kaanta, R. A. Previti-Kelly, and J. G. Ryan	Process for Forming Multi-Level Coplanar Conductor/Insulator Films Employing Photosensitive Polyimide Polymer Compositions
5,091,659	M. S. Michail and J. R. Struk	Composite Logic Gate Circuit with Means to Reduce Voltage Required by Logic Transistors from External Source
5,091,720	R. T. Wood	Display System Comprising a Windowing Mechanism
5,091,792	Y. Kaida	Liquid Crystal Display Having Reduced ITO Shading Material and Method of Manufacturing Same
5,091,794	S. Suzuki	Twisted Nematic Liquid Crystal Display Device
5,091,837	W. S. Duspiva and J. B. Gillett	Regulated Power Supply with Electrically Isolated Control and Variable Impedance Means in Series with On-Off Control Means
5,091,896	S. Takayama	Method and Apparatus for Magneto-Optical Recording Using a Demagnetization Field and Erasing Using External Magnetic Field
5,092,032	T. Murakami	Manufacturing Method for a Multilayer Printed Circuit Board
5,092,510	J. R. Anstrom, R. D. Hrehor, Jr., R. A. Holloway, and D. P. Watson	Method and Apparatus for Circuit Board Support During Component Mounting
5,093,279	J. C. Andreshak and R. J. Baseman	Laser Ablation Damascene Process
5,093,584	J. A. Woyke, O. Bula, G. S. Koch, and R. S. Gomez	Self Calibrating Timing Circuit
5,093,596	R. Hammer	Combined Linear-Rotary Direct Drive Step Motor
5,093,614	G. K. Woodworth	Three Phase Delta Reference Transformer
5,093,832	D. S. Bethune and W. J. Kozlovsky	Laser System and Method with Temperature Controlled Crystal
5,093,863	C. Galand and M. Rosso	Fast Pitch Tracking Process for LTP-Based Speech Coders
5,093,879	M. F. Bregman, W. D. Brewer, M. S. Cohen, G. W. Johnson, I. C. Noyan, M. M. Oprysko, M. B. Ritter, D. L. Rogers, and J. M. Trehwella	Electro-Optical Connectors
5,093,890	M. F. Bregman, I. C. Noyan, M. B. Ritter, and H. S. Stone	Optical Bus for Computer Systems
5,093,901	C. M. N. Cree, G. J. Landry, K. J. Scully, and H. Singh	System for Exchanging Electronic Calendars Based on Entries and Classification Among Users of the System

5,093,908	T. J. Beacom, J. D. Brown, M. R. Funk, S. A. Hilker, and D. G. Young	Method and Apparatus for Executing Instructions in a Single Sequential Instruction Stream in a Main Processor
5,093,911	C. A. Parks, R. E. Probst, D. Rajagopal, and G. L. Youngs	Storage and Retrieval System
5,093,912	M. A. Dong and R. K. Treiber	Dynamic Resource Pool Expansion and Contraction in Multiprocessing Environments
5,093,916	A. H. Karp, R. G. Scarborough, A. W. Shannon, J.-F. Shaw, and L. J. Toomey	System for Inserting Constructs into Compiled Code, Defining Scoping of Common Blocks and Dynamically Binding Common Blocks to Tasks
5,093,918	J. G. Heyen, C. Kasiraj, and T. J. Wolf	System Using Independent Attribute Lists to Show Status of Shared Mail Object Among Respective Users
5,094,381	R. A. Amos, J. R. Anstrom, F. W. Bogaczyk, R. W. Kulterman, G. B. Nebgen, D. R. Polk, M. A. Rubsam, D. P. Watson, T. L. Wilmoth, and C. M. Wood	System for Automated Mounting of Electronic Components to Circuit Boards
5,094,769	H. R. Anderson, Jr., R. B. Booth, L. D. David, M. O. Neisser, H. S. Sachdev, and M. A. Takacs	Compliant Thermally Conductive Compound
5,095,302	J. G. McLean, C. A. Pickover, and A. R. Reed	Three Dimensional Mouse Via Finger Ring or Cavity
5,095,378	S. Suzuki	Uniform Contrast Liquid Crystal Display With Varied Liquid Crystal Thickness
5,095,379	T. Fukunaga, A. Ikeda, and T. Ueki	Color Filter, Liquid Crystal Display Using Same and Method of Repair Thereof by Using a Negative Photosensitive Resin
5,095,420	C. K. Eilert, D. H. Gibson, K. G. Rubsam, C. A. Scalzi, R. J. Schmalz, and E. S. Schulze	Method and System for Performing Virtual Address Range Mapping a Virtual Storage Data Processing System
5,095,421	T. J. Freund	Transaction Processing Facility Within an Operating System Environment
5,095,483	J. F. Dubler, S. G. Robinson, and D. A. Valashinas	Signature Analysis in Physical Modeling
5,095,484	R. Karabed and P. H. Siegel	Phase Invariant Rate 8/10 Matched Spectral Null Code for PRML
5,095,491	W. J. Kozlovsky and W. P. Risk	Laser System and Method
5,095,699	E. D. Blackshear	Stirling Type Cylinder Force Amplifier
5,096,737	T. H. Baum, C. E. Larson, and S. K. Reynolds	Ligand Stabilized +1 Metal Beta-Diketonate Coordination Complexes and Their Use in Chemical Vapor Deposition of Metal Thin Films
5,096,849	K. E. Beilstein, Jr., C. L. Bertin, and F. R. White	Process for Positioning a Mask Within a Concave Semiconductor Structure
5,097,127	W. W. Hildenbrand and S. G. Utterback	Multiple Detector System for Specimen Inspection Using High Energy Backscatter Electrons
5,097,129	M. S. de Vries, W. G. Golden, and H. E. Hunziker	Surface Contamination Detection Using Infrared-Transparent Fibers or Attenuated Total Reflection Crystals
5,097,144	A. Y. Chang, A. J. Gruodis, D. E. Hoffman, and D. E. Skooglund	Driver Circuit for Testing Bi-Directional Transceiver Semiconductor Products
5,097,261	G. G. Langdon, Jr., N. H. MacLean, Jr., R. W. Miller, and M. R. Patel	Data Compression for Recording on a Record Medium
5,097,361	E. R. Childers, A. A. Fennema, and D. P. McReynolds	Controlling Position of a Rotatable Transducer in Devices Employing Such Transducers
5,097,385	R. C.-F. Chu, R. E. Simons, and D. T. Vader	Super-Position Cooling
5,097,410	R. L. Hester, S. P. Jackowski, P. N. James, J. T. Moyer, R. G. Rush, G. S. Ulsh, and M. J. Wolski	Multimode Data System for Transferring Control and Data Information in an I/O Subsystem
5,097,528	S. K. Gursahaney, D. J. Helm, D. R. Lee, R. J. Madrid, V. S. McKenzie, and S. K. Miller	System for Integrating Telephony Data with Data Processing Systems
5,097,533	B. H. Burger and D. S. Hidalgo	System and Method for Interfacing Computer Application Programs Written in Different Languages to a Software System
5,098,175	K. K. Cooke and J. R. Dewitt	Removable Guide Apparatus for a Rail-Mounted Device Employed in a Computer
5,098,533	P. J. Duke and K. W. Semkow	Electrolytic Method for the Etch Back of Encapsulated Copper-Invar-Copper Core Structures
5,098,766	J. D. Gelorme and E. R. Skarvinko	Encapsulated Wire Circuit Board
5,098,816	E. D. Babich, J. D. Gelorme, M. Hatzakis, J. M. Shaw, K. J. Stewart, and D. F. Witman	Method for Forming a Pattern of a Photoresist
5,098,856	K. D. Beyer, L. L. Hsu, and S. K. Kulkarni	Air-Filled Isolated Trench with Chemically Vapor Deposited Silicon Dioxide Cap
5,098,857	T. F. Kuech and M. A. Tischler	Method of Making Semi-Insulating Gallium Arsenide by Oxygen Doping in Metal-Organic Vapor Phase Epitaxy

5,098,859	T. N. Jackson, M. Murakami, W. H. Price, S. Tiwari, J. M. Woodall, and S. L. Wright	Method for Forming Distributed Barrier Compound Semiconductor Contacts
5,099,299	F. F. Fang	Modulation Doped Base Heterojunction Bipolar Transistor
5,099,309	B. R. Kryzaniwsky	Three-Dimensional Memory Card Structure With Internal Direct Chip Attachment
5,099,393	J. R. Bentlage, D. E. Engle, G. R. Mariner, J. J. Squires, and J. H. Williams	Electronic Package for High Density Applications
5,099,394	R. A. Hood and J. W. Reiswig	Offset Basecard
5,099,415	P. J. Osler and F. T. Tong	Guess Mechanism for Virtual Address Translation
5,099,421	D. J. Buerkle and A. Y. Ngai	Variable Length Pipe Operations Sequencing
5,099,426	R. G. Carlgren and W. D. Modlin	Method for Use of Morphological Information to Cross Reference Keywords Used for Information Retrieval
5,099,431	B. Natarajan	Automated Re-Work Shop Order Scheduling System
5,099,440	W. B. Pennebaker and J. L. Mitchell	Probability Adaptation for Arithmetic Coders
5,099,571	J. S. Logan, R. R. Ruckel, R. E. Tompkins, and R. P. Westerfield, Jr.	Method for Fabricating a Split-Ring Electrostatic Chuck
5,100,215	K. K. Cooke, J. R. Dewitt, and P. J. Galinis	Enclosure Apparatus for Retaining Devices Within a Computer
5,100,220	O. Voegeli	Semiconductor Laser Diode Arrangement and Method of Making Same
5,100,817	C. Cederbaum, R. Chancelou, M. Combes, and P. Moné	Method of Forming Stacked Self-Aligned Polysilicon PFET Devices and Structures Resulting Therefrom
5,101,120	H. A. Bonges III and R. C. Flaker	BICMOS Output Driver
5,101,203	J. E. Gersbach and I. I. Novof	Digital Data Regeneration and Deserialization Circuits
5,101,242	H. Ikeda, O. Shimada, T. Uchida, and T. Murakami	Thin Film Transistor
5,101,243	C.-C. J. Chi and A. W. Kleinsasser	Superconducting Device Structures Employing Anisotropy of the Material Energy Gap
5,101,256	D. L. Harame and J. M. C. Stork	Bipolar Transistor with Ultra-Thin Epitaxial Base and Method of Fabricating Same
5,101,266	E. S. Schlig and Y. L. Yao	Single-Scan Time Delay and Integration Color Imaging System
5,101,345	M. G. MacPhail	Method of Filing Stapled Documents with a Staple Relationship Involving One or More Application Programs
5,101,348	A. H. Arrowood, K. E. Clarke, J. E. Drake, Jr., J. L. Eisenbies, J. P. Gray, K. J. Norsworthy, D. P. Pozefsky, and T. D. Smetanka	Method of Reducing the Amount of Information Included in Topology Database Update Messages in a Data Communications Network
5,101,372	J. G. Heaslip	Optimum Performance Standard Cell Array Multiplier
5,101,395	S. A. Cardero, B. G. Goodman, and J. Lewkowicz	Data Detection Employing High-Speed Baseline Tracking Compensation
5,101,409	G. E. Hack	Checkboard Memory Self-Test
5,101,476	R. W. Kukla	Patient Care Communication System
5,101,477	D. F. Casper, J. R. Flanagan, T. A. Gregg, C. C.-W. Huang, and M. J. Kalos	System for High Speed Transfer of Data Frames Between a Channel and an Input/Output Device with Request and Backup Request Count Registers
5,102,028	A. Z. Glovatsky, R. J. Lynch, J. G. Motto, Jr., S. A. Repchak, J. M. Vittone, and L. R. Yetter	Localized Soldering Station Using State Changing Medium
5,102,290	T. M. Cipolla	Transfer Device
5,102,343	A. D. Knight and J. R. Petrozello	Fluid Pressure Actuated Electrical Connector
5,102,456	R. Jagannathan, R. F. Knarr, M. Krishnan, and G. P. Wandy	Tetra Aza Ligand Systems as Complexing Agents for Electroless Deposition of Copper
5,102,970	D. W. Wang	Liquid Epoxy Polymer Composition Based on Cycloaliphatic Amine Cured Difunctional/Polyfunctional Epoxy Blends
5,103,293	E. J. Bonafino, E. W. Carpenter, P. J. Lueck, W. J. Summa, and D. W. Wang	Electronic Circuit Packages with Tear Resistant Organic Cores
5,103,340	N. R. Dono, P. E. Green, Jr., and P. A. Perrier	Multiple-Cavity Optical Filter Using Change of Cavity Length
5,103,362	K. A. Belser and R. J. Whitefield	Method of Electrostatically Sensing Track Position Information for Magnetic Recording Medium
5,103,449	C. H. Jolissiant	PBX Transparent ANI and DNIS Using VRU
5,103,478	S. M. Matyas, D. G. Abraham, D. B. Johnson, R. K. Karne, A. V. Le, P. J. McCormack, R. Prymak, and J. D. Wilkins	Secure Management of Keys Using Control Vectors with Multi-Path Checking
5,105,537	M. Datta, D. A. King, A. D. Knight, and C. J. Sambucetti	Method for Making a Detachable Electrical Contact
5,106,450	N. Freisitzer and R. G. Meinert	Dry Film Resist Transport and Lamination System for Semiconductor Wafers

5,106,451	J. C. Kan and C. Yakubowski	Heat Sink and Method of Attachment
5,106,767	J. H. Comfort, T.-C. Chen, P.-F. Lu, B. S. Meyerson, Y.-C. Sun, and D. D. Tang	Process for Fabricating Low Capacitance Bipolar Junction Transistor
5,107,264	I. L. Novof	Digital Frequency Multiplication and Data Serialization Circuits
5,107,419	M. G. MacPhail	Method of Assigning Retention and Deletion Criteria to Electronic Documents Stored in an Interactive Information Handling System
5,107,459	C. M. Chu, S. H. Dhong, W. Hwang, and N. C.-C. Lu	Stacked Bit-Line Architecture for High Density Cross-Point Memory Cell
5,107,496	T. E. Cook, M. J. Fantacone, I. Hatanaka, and H. M. Yudenfriend	Method and System for Detecting and Recovering from Switching Errors
5,107,507	P. M. Bland, M. E. Dean, G. J. Gaudenzi, K. G. Kramer, and S. L. Tempest	Bidirectional Buffer with Latch and Parity Capability
5,107,518	J. S. Petty, Jr.	Lockup Prevention Method and Apparatus