

Patents Recently Issued to IBM Inventors

July and August 1970

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3,518,756	Fabrication of Multilevel Ceramic, Microelectronic Structures.....	<i>M. Bennett, W. E. Boyd and J. C. Nobile</i>
3,519,355	Light Filter.....	<i>R. S. Schools and G. T. Sincerbox</i>
3,519,498	Ferromagnetic Film.....	<i>K. Y. Ahn</i>
3,519,504	Method for Etching Silicon Nitride Films with Sharp Edge Definition..	<i>J. J. Cuomo</i>
3,519,747	Signal Insertion and Conferencing in a Resonant Transfer Integrated Time Division Switching and Frequency Division Multiplexing.....	<i>C. D. Avers and P. M. Thrasher</i>
3,519,760	Magnetic Duplicating Apparatus Using a Multiple Gap DC Head....	<i>E. T. Hatley</i>
3,519,788	Automatic Registration of an Electron Beam.....	<i>M. Hatzakis</i>
3,519,801	Record Card Processing Machine.....	<i>G. F. Nielsen, D. K. Rex, R. E. Schopp and L. A. Wilson</i>
3,519,807	Digital Controller with Alarm.....	<i>J. O. Jacques and R. K. Oswald</i>
3,519,830	Method and Means for Maintaining the Resolution of a Scanning System Having an Undefined Object Plane.....	<i>L. A. Kamensky</i>
3,519,844	Electro-optical Logic Circuits Performing NOR Functions.....	<i>I. G. Akmenkalns</i>
3,519,845	Current Mode EXCLUSIVE-OR Invert Circuit.....	<i>M. T. Larriva</i>
3,519,850	Differential Sense Amplifier and Detector Circuit.....	<i>R. Smith</i>
3,519,953	High Speed Scanlaser.....	<i>R. L. Gamblin and D. D. Roshon</i>
3,519,999	Thin Polymeric Film Memory Device.....	<i>L. V. Gregor</i>
3,520,000	Two-dimensional Delay Line Memory.....	<i>W. G. Spruth</i>
3,520,532	Document Handling Mechanism.....	<i>D. D. Towne</i>
3,520,664	Magnetic Thin-film Device.....	<i>D. B. York</i>
3,520,784	Method of Preparing a Coupled-film Device.....	<i>G. S. Alberts, J. M. Brownlow and K. R. Grebe</i>
3,520,810	Manufacture of Single Crystal Semiconductors.....	<i>T. S. Plaskett, J. M. Woodall and W. C. Wuestenhoefer</i>
3,520,998	Resonant Transfer of Energy Between Bandpass Filters of Unequal Bandwidth.....	<i>P. M. Thrasher and R. J. Ward</i>
3,521,018	Temperature Sensor.....	<i>F. E. Boerger and W. H. White, Jr.</i>
3,521,033	Record Card Reader.....	<i>G. H. May</i>
3,521,041	Digital Filters.....	<i>R. Van Blerkom and D. G. Freeman</i>
3,521,042	Simplified Digital Filter.....	<i>R. Van Blerkom, D. G. Freeman and R. J. Ward</i>
3,521,043	Ripple-free Binary Coded Decimal Accumulator Forming Correct Result During Single Memory Accessing Cycle.....	<i>B. G. Thompson</i>
3,521,068	Optical Time Division Multiplex Communication System.....	<i>J. A. Armstrong and W. V. Smith</i>
3,521,092	Data Storage Extended Stroke Actuator.....	<i>C. H. Kalthoff</i>
3,521,113	Electron Beam Apparatus Incorporating a Hollow Pyramidal Indirectly Heated Cathode Member.....	<i>A. N. Broers</i>
3,521,133	Superconductive Tunneling Gate.....	<i>W. R. Beam</i>
3,521,141	Leakage Controlled Electric Charge Switching and Storing Circuitry..	<i>C. A. Walton</i>
3,521,180	Active Transmission Line Device.....	<i>W. Jutzi</i>
3,521,241	Two-dimensional Data Compression.....	<i>D. H. Rumble</i>
3,521,243	Frequency Memory Using a Gunn-effect Device in a Feedback Loop..	<i>P. L. Fleming</i>
3,521,269	Tracking Analog-to-digital Converter.....	<i>E. G. Brooks and J. S. Gentelia</i>
3,522,344	Flexible Self-supporting Cut-resistant Writing Element.....	<i>H. T. Findlay</i>
3,522,372	Frequency Modulated Signal Switching with Frequency Divided Output.	<i>J. L. Adkisson and A. B. Manildi</i>

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3,522,597	Execution Plotter.....	<i>R. W. Murphy</i>
3,523,037	Epoxy Resin Composition Containing Brominated Polyglycidyl Ether of Bisphenol A and A Polyglycidyl Ether of Tetrakis (Hydroxyphenyl) Ethane.....	<i>L. N. Chellis</i>
3,523,046	Method of Epitaxially Depositing Single-crystal Layer and Structure Resulting therefrom.....	<i>E. G. Grochowski and V. J. Lyons</i>
3,523,229	Digital-analog Servo System.....	<i>R. J. Black, F. J. Sordello and J. S. Swartz</i>
3,523,287	Recording and Playback System Incorporating a First Character Posi- tioning System.....	<i>D. J. Morrison and H. C. Tanner</i>
3,523,291	Data Transmission System.....	<i>J. M. Pierret</i>
3,523,352	Apparatus for Mounting Semiconductor Chips with Ball Contacts upon a Substrate and Forming Electrical Strap Connections to the Substrate from the Ball Contacts.....	<i>C. P. Hayunga</i>

3,523,495	Apparatus for Forming Circuit Masks on Photosensitized Screens and Inspecting the Same and/or Inspecting Substrates Having Conductive Circuit Patterns	<i>G. R. Giedd and M. H. Perkins</i>
3,523,706	Apparatus for Supporting Articles without Structural Contact and for Positioning the Supported Articles	<i>J. C. Logue</i>
3,523,790	Enhanced and Stable Photographic Images	<i>A. W. Grobin, Jr.</i>
3,523,824	Metallization of Plastic Materials	<i>J. V. Powers and L. T. Romankiw</i>
3,523,834	Method of Deburring	<i>T. F. Hewins</i>
3,524,026	Remote Dictation Apparatus with Automatic Control Tone Elimination	<i>M. P. Langendorf, C. L. Ridings and W. H. Sebastian</i>
3,524,047	Photosensitive Sensing System	<i>W. H. Gorder and N. D. Kline</i>
3,524,067	Compact Line Grating Position Sensing Device	<i>D. L. West</i>
3,524,113	Complementary PNP-NPN Transistors and Fabrication Method therefor	<i>B. Agusta and N. D. Lubart</i>
3,524,125	Monolithic Stabilized Reference Voltage Source	<i>H. H. Berger, N. M. Callaghan, K. K. Najmann and L. J. Ruggeri</i>
3,524,164	Detection and Error Checking System for Binary Data	<i>C. W. Cox and F. T. May</i>
3,524,181	Display System	<i>T. N. Criscimagna and T. G. Floros</i>
3,524,182	Display System	<i>T. N. Criscimagna</i>
3,524,252	Method of Ultrasonically Treating Ferrite Cores	<i>R. W. Dam and B. Gogos</i>
3,524,383	Pneumatic Actuator	<i>C. H. Locke</i>
3,524,394	Monolithic Circuit Manufacture and Photoresist Exposure Technique Utilized therein	<i>B. Sunners</i>
3,524,497	Heat Transfer in a Liquid Cooling System	<i>R. C. Chu, M. G. Cohen and O. Gupta</i>
3,524,527	Alternate Character Selection Mechanism for Typewriters	<i>R. V. Davidge</i>
3,524,540	Dust Cover and Knob Assembly	<i>S. F. Brown and D. L. Massee</i>
3,524,602	Endless Ribbon Cartridge	<i>P. J. Greene and J. D. Sbarra</i>
3,524,928	High Speed Optical Scanning System	<i>T. A. Hoskins</i>
3,524,953	Object Presence Sensor	<i>C. P. Coughlin, G. H. Luhrs and R. W. Thorpe</i>
3,525,013	Metallic Ion Source Including Plurality of Electron Guns	<i>J. C. Pelton, Jr. and R. C. Senger</i>
3,525,066	Electrical Contact Pins and Method of Making Same	<i>R. A. Magee and J. S. Scioscia</i>
3,525,074	Detection of Too Many or Too Few Characters	<i>A. Cutaia</i>
3,525,084	Memory Sense System with Fast Recovery	<i>L. J. Dunlop and P. Rohr</i>
3,525,140	Micro-motion Device	<i>R. P. Cachon, J. C. Miller and L. S. Scheiner</i>
3,525,295	Automatic Film Processor	<i>R. B. Mulvany and C. C. Roshon</i>
3,525,518	Self-adjusting and Repositioning Card Gate	<i>A. Oaten</i>
3,525,638	Magnetostriction Control in Magnetic Thin Films	<i>W. B. Archey</i>
3,525,680	Method and Apparatus for the Radio Frequency Sputtering of Dielectric Materials	<i>P. D. Davidse and W. J. Kleinfelder</i>
3,525,870	Magnetic Memory having Polarized State Detector	<i>R. E. MacDonald, C. D. Mee and O. Voegeli</i>
3,525,937	Matched Impedance Test Probe Fixture	<i>D. T. Mozer</i>
3,525,984	Electronic Computing Business Machine	<i>E. C. Clay, P. J. De George, W. I. Lockett, W. L. McDonald and J. R. Stewart</i>