

Patents Recently Issued to IBM Inventors

May and June 1970

May 1970

3,509,982	Automatic Letter Underscoring Mechanism.....	L. E. Palmer
3,510,223	Optical Cross-correlation and Convolution.....	A. W. Lohmann
3,510,297	Process for Producing Negative Transparencies.....	C. E. Herrick, Jr., V. Vahtra and M. D. Shattuck
3,510,438	Moisture Sensitive Fillers in Polymer Matrix Writing Elements.....	H. T. Findlay and W. H. Horne
3,510,489	Web Fabrication Process.....	A. E. Graham, R. L. Dueltgen, W. L. Mitchell and H. E. Sweazy
3,510,658	Light Beam Servoing System with Memory Element Having Wavelength-discriminating Guide and Data Tracks.....	M. E. Rabedeau
3,510,786	Synchronizing Circuit Compensating for Data Bit Shift.....	D. H. Paulson
3,510,846	Left and Right Shifter.....	R. E. Goldschmidt and D. M. Powers
3,510,866	Reverse Scanning System.....	H. E. Kronick, C. E. Newcomb and S. Singer
3,511,354	Forms Velocity Control for Printers.....	J. G. Barcomb and F. W. Schaaaf
3,511,937	Free Path Finding Device in a Switching Network.....	M. Bastian and F. Bohy
3,511,977	Electronic Counter.....	L. M. Hornung
3,512,132	Composing Apparatus with Table Lookup Mode.....	J. E. Jones and R. A. Rahenkamp
3,512,137	Correlated Recording, Reproducing, Printing and Composing Apparatus	J. E. Jones, R. A. Kolpek and R. A. Rahenkamp
3,512,138	Computer System with Printer Position Recognition and Control.....	F. T. May and T. H. Williams
3,512,144	Mounting Assembly for Magnetic Strip Storage Cells.....	D. L. Stoddard
3,512,168	Apparatus for Recording in a Metastable State with Reversion to a Stable State.....	G. Bate
3,512,582	Immersion Cooling System for Modularly Packaged Components.....	R. C. Chu, U. P. Hwang and J. H. Seely
3,512,865	D-C Free Electro-optic Crystal System.....	D. C. Chang and J. Lipp
3,512,871	Light Beam Deflection Using Fourier Optics	H. J. Zweig
3,512,879	Bandwidth-coded Photographic Film Memory.....	J. L. Reynolds, R. S. Schools and G. T. Sincerbox
3,512,966	Process of Electrophotographic Recording Employing Persistent Organic Photoconductive Compositions.....	M. D. Shattuck, J. Vahtra and D. A. Nepela
3,512,967	Electrophotographic Method and Member for Contact Printing of Relatively Opaque Documents.....	C. E. Herrick, Jr.
3,513,260	Speech Presence Detector.....	G. A. Hellwarth, G. D. Jones and A. C. Ruocchio
3,513,263	Private Branch & Telephone Switching System.....	M. Bastian, P. P. Chu, B. Corby, A. James, R. Le Blanc and A. Milewski
3,513,266	Magnetic Recording System for Wideband Signal Multiplexing by Frequency Modulation.....	W. T. Frost and C. T. Masters
3,513,302	Closed Loop Controller having Digital Integrator with Variable Gain.....	J. O. Jacques, P. A. Kuckein and R. K. Oswald
3,513,323	Light Beam Deflection System.....	G. T. Sincerbox and J. L. Reynolds
3,513,450	Cylindrical Film Storage Device with Circumferential Conductor Overlapping the Film Edge.....	G. R. Hoffman and D. Aspinall
3,513,774	Printer Hammer Compensation.....	J. P. Pawletko and C. O. Ross
3,513,938	Acoustical Covers for Office Machines.....	W. L. Buehner, D. L. Greer, R. W. McCornack, P. L. O'Brian and H. W. Simpson
3,514,049	Strip Record Medium Contact Belt Driven Transports.....	D. D. Decker and D. M. Roberts
3,514,099	Document Handling Apparatus.....	R. C. Miller
3,514,177	Holography of Non-coherently Illuminated Objects.....	A. W. Lohmann
3,514,182	Light Focus Shifting System.....	W. K. Banks
3,514,183	Light Deflector System.....	M. E. Rabedeau
3,514,546	Electronic Computing Business Machine.....	P. J. De George, W. I. Lockett and W. L. McDonald
3,514,632	Programmable Sawtooth Waveform Generator.....	J. W. Henderson and L. Prymak
3,514,633	Threshold Detector Circuit with Cross Coupled Transistor Pairs.....	E. Schroeder
3,514,729	Pulse Generating Switch Device.....	G. T. Webb
3,514,753	Character Recognition System.....	J. J. Kennedy and N. R. Plummer
3,514,766	Beam Addressable Memory System.....	C. D. Mee, R. E. MacDonald and O. Voegeli
3,514,769	Random Access Data File.....	J. W. Woods
3,514,770	Reciprocating Magnetic Read/Write Head.....	E. W. Parken

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3,515,063	Imprinter with Print Mode Selection.....	J. C. Baker and T. W. Thompson
3,515,344	Apparatus for Accumulating the Sum of a Plurality of Operands.....	R. E. Goldschmidt, R. J. Litwiller and D. M. Powers
3,515,452	Forming a Hologram of a Subject Recorded on an Integral Photograph with Incoherent Light.....	R. V. Pole
3,515,585	Gelation Coating Method for Electronic Circuit Panels.....	J. B. Chamberlin and R. W. North
3,515,590	Temperature Stable Ink Transfer Coating Compositions.....	D. J. Lazzarini, J. J. Sabad and R. T. Wiley
3,515,855	Xerographic Fusing Apparatus.....	A. L. Mix, Jr.
3,515,877	Electro Optical Positioner.....	D. W. Baxter, P. F. Heidrich, J. M. Massing and C. B. Smdyer
3,515,897	Stimulated Raman Parametric Amplifier.....	W. H. Culver
3,515,998	Real-time Detection of Latch Resolution Using Threshold Means.....	R. L. Adams, D. C. Castaldo and G. W. Kurtz
3,516,013	Scanning Laser Having a Conjugate Concentric Cavity so that the Direction in which Light is Emitted can be Controlled.....	R. V. Pole
3,516,021	Field Effect Transistor Microwave Generator.....	G. Kohn
3,516,026	Method and Means for Attenuating Common Mode Electrical Noise Currents.....	J. E. Curran and J. F. O'Donnell
3,516,065	Digital Transmission System.....	M. H. Bolt and H. H. Nick
3,516,070	Storage Addressing.....	F. J. Campano, G. C. Hiatt and W. McGovern
3,516,078	Apparatus for Selection of Memory Word Location.....	R. E. Matick and J. R. Mayfield
3,516,079	Magnetic Storage Device which Exhibits Pseudo-biaxial Magnetic Properties.....	E. W. Pugh
3,516,156	Circuit Package Assembly Process.....	J. J. Steranko
3,516,528	Character Selector.....	R. V. Davidge, D. L. Greer, R. W. McCormack and J. B. O'Daniel
3,516,604	Sequential Keyboard Interlock.....	J. C. Taylor, R. E. Yates and M. N. Zell
3,516,855	Method of Depositing Conductive Ions by Utilizing Electron Beam.....	E. C. Baldwin
3,517,130	Communication Multiplexing Circuit Featuring Non-synchronous Scanning.....	R. G. Rynders
3,517,149	Actuator for Diaphragm Type Switch.....	J. L. Yarrowrough
3,517,224	Regulated Transistorized Current Source Having Temperature Compensation.....	D. W. Murphy
3,517,258	Solid State Display Device Using Light Emitting Diodes.....	R. J. Lynch
3,517,280	Four Layer Diode Device Insensitive to Rate Effect and Method of Manufacture.....	L. L. Rosier
3,517,337	Modulation of Scanning Beams in Injection Lasers.....	B. R. Shah
3,517,387	Character Isolation Apparatus.....	D. R. Andrews, A. J. Atrubin, R. J. Baumgartner, M. F. Bond and K. C. Hu
3,517,391	Digital Computer.....	J. J. Lentz
3,517,438	Method of Packaging a Circuit Module and Joining Same to a Circuit Substrate.....	A. H. Johnson and W. R. McConnell
3,517,592	Reciprocating Lens Photocomposer.....	E. P. Kollar
3,517,593	Reciprocating Lens Photocomposer.....	J. L. Overacker
3,517,958	Vacuum Pick-up with Air Shield.....	P. D. Boucher and J. C. Miller
3,518,084	Method for Etching an Opening in an Insulating Layer Without Forming Pinholes Therein.....	F. Barson, R. T. Kuehn and M. D. Palmer
3,518,130	Method of Making Conductive Circuit Patterns by Intaglio Process.....	Z. Cacka and G. V. Elmore
3,518,170	Electrodeposition of Iron Group Metals.....	H. Koretzky
3,518,250	Substitution of Imino-heterocyclic Compounds.....	R. R. Schumaker
3,518,450	Logic Circuit Directionally Combining Single Pulses Representing Logic Variables.....	M. H. Bolt and H. H. Nick
3,518,503	Semiconductor Structures of Single Crystals on Polycrystalline Substrates.....	V. Y. Doo
3,518,506	Semiconductor Device with Contact Metallurgy Thereon, and Method for Making Same.....	H. R. Gates
3,518,516	Stepping Motor Constant Velocity Drive.....	J. P. Pawletko
3,518,547	Digital Communication System Employing Multiplex Transmission of Maximal Length Binary Sequences.....	R. F. Filipowsky
3,518,574	Injection Laser Device.....	R. F. Rutz
3,518,593	Magnetic Handling Device.....	B. P. Hall
3,518,612	Connector Assembly.....	J. P. Dunman and J. G. Axford
3,518,631	Associative Memory System Which Can Be Addressed Associatively or Conventionally.....	A. B. Linquist, W. D. Pricer and R. R. Seeber
3,518,658	Digital Comparison-to-Analog Signal Converter.....	R. J. Black and F. J. Sordello
3,518,656	Remotely Controlled High Energy Discharge Drive Circuit.....	R. L. Schaaf