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|-----|---|-----|--|
| 1   | <b>ELECTRICAL HYBRID CALCULATING COMPUTER</b>               | 161 | .Having supplemental environment related output              |
| 2   | .Plural complete computers                                  | 162 | ...Teaching  |
| 3   | .Particular function performed                              | 163 | ...Business  |
| 4   | ..Evaluation of trigonometric function                      | 164 | ..Output verification  |
| 5   | ..Correlation, convolution, or transformation               | 165 | ..Blanking   |
| 6   | ..Integration or differentiation                            | 166 | ..Zero suppression   |
| 7   | ..Multiplication or division                                | 167 | ..Prompting  |
| 8   | ..Function generation                                       | 168 | ..Selective output   |
| 9   | ...Piece-wise linear synthesis                              | 169 | ..Sequential output  |
| 100 | <b>ELECTRICAL DIGITAL CALCULATING COMPUTER</b>              | 170 | ..Using particular format                                    |
| 101 | .Pulse repetition rate                                      | 171 | ..Symbol accompanying output                                 |
| 102 | ..Digital differential analyzer                             | 172 | ..Audio  |
| 103 | ..Multiplication or division                                | 173 | ..Printer  |
| 104 | .Plural complete computers                                  | 174 | ..Multiple simultaneous outputs                              |
| 105 | .Combined with diverse art device                           | 190 | .Integrated circuit  |
| 106 | ..Checkbook   | 191 | .Electro-optical   |
| 107 | ..Writing instrument (e.g., pen)                            | 192 | .Bubble-domain   |
| 108 | ..Tape recorder   | 200 | .Particular function performed                               |
| 109 | ..Communication device (e.g., telephone, radio, television) | 201 | ..Absolute value or magnitude                                |
| 110 | ..Business device (e.g., billing, memorandum)               | 202 | ..Median   |
| 111 | ..Horological device  | 203 | ..Compression/decompression                                  |
| 112 | ...Calendar   | 204 | ..Format conversion  |
| 130 | .Programmable calculator                                    | 205 | ..Normalization  |
| 131 | .Having specialized input                                   | 206 | ..Unit conversion  |
| 132 | ..Having supplemental environment related input             | 207 | ..Maximum/minimum determination                              |
| 133 | ...Cooking  | 208 | ..Scaling  |
| 134 | ...Business   | 209 | ..Shifting   |
| 135 | ..For security  | 210 | ..Determining number of like-valued bits in word             |
| 136 | ..Input verification  | 211 | ..Determining number of like-valued leading or trailing bits |
| 137 | ..Fraction input  | 212 | ..Detecting particular sequence of bits                      |
| 138 | ..Flexible input  | 230 | ..Multifunctional  |
| 139 | ..Including specific computing system interconnection       | 231 | ...Microprocessor  |
| 140 | ..Modular or overlay nonkeyboard-type information entry     | 232 | ...Array of elements (e.g., AND/OR array, etc.)              |
| 141 | ..Including specific nonkeyboard-type information entry     | 233 | ...Pipeline  |
| 142 | ..Including specific keyboard-type information entry        | 234 | ...Parallel bit input of operand                             |
| 143 | ...Nonmechanical key actuation                              | 235 | ...Uses look-up table  |
| 144 | ...User definable key                                       | 236 | ...More than two operands                                    |
| 145 | ...Plural function key                                      | 250 | ..Random number generation                                   |
| 146 | ...Key sequencing (i.e., sequence defines function)         | 251 | ..Oscillator controlled                                      |
| 160 | .Having specialized output                                  | 252 | ..Linear feedback shift register                             |
|     |   | 253 | ..Plural parallel outputs bits                               |
|     |   | 254 | ...Seed value controls                                       |
|     |   | 255 | ...Truly random number                                       |
|     |   | 256 | ..Plural parallel outputs                                    |
|     |   | 270 | ..Function generation  |
|     |   | 271 | ...Direct digital frequency synthesizer                      |

|     |   |     |   |
|-----|---|-----|---|
| 272 | ...Memory used to store waveshape             | 440 | ..Evaluation of trigonometric function                          |
| 273 | ...Counter as source (i.e., input)            | 441 | ...Vector resolver  |
| 274 | ...Linear                                     | 442 | ..Coordinate conversion   |
| 275 | ...Circular                                   | 443 | ..Differentiation   |
| 276 | ...Trigonometric                              | 444 | ..Integration   |
| 277 | ...Logarithmic/exponential                    | 445 | ..Averaging   |
| 290 | ..Interpolation/extrapolation                 | 446 | ..Solving equation  |
| 300 | ..Filtering                                   | 490 | ..Arithmetical operation  |
| 301 | ...Tapped delay line                          | 491 | ...Residue number   |
| 303 | ...Microprocessor                             | 492 | ...Galois field   |
| 304 | ...Nonlinear (e.g., median, etc.)             | 493 | ...Multi-valued   |
| 305 | ...Initialization                             | 494 | ...Incremental mode   |
| 306 | ...Finite arithmetic effect                   | 495 | ...Floating point   |
| 307 | ...Delta/differential coded                   | 496 | ....Compensation for finite word length                         |
| 308 | ...Multidimensional data                      | 497 | .....Round off or truncation                                    |
| 309 | ...Frequency measurement                      | 498 | .....Overflow or underflow                                      |
| 310 | ...Coherent                                   | 499 | .....Sticky bit   |
| 311 | ...Frequency detection                        | 500 | ....Evaluation of root  |
| 312 | ....Tone detection                            | 501 | ....Multiplication followed by addition                         |
| 313 | ...Decimation/interpolation                   | 502 | ....Reciprocal  |
| 314 | ...Matched filter type                        | 503 | ....Multiplication  |
| 315 | ...By convolution                             | 504 | ....Division  |
| 316 | ...Having multiplexing                        | 505 | ....Addition or subtraction                                     |
| 317 | ...Wave                                       | 506 | ....Feedback  |
| 318 | ...Lattice                                    | 507 | ....Parallel  |
| 319 | ...Transversal                                | 508 | ....Pipeline  |
| 320 | ...Recursive                                  | 509 | ....Systolic  |
| 321 | ...Nontime domain                             | 510 | ....Microprocessor  |
| 322 | ...Adaptive                                   | 511 | ....Complex number format                                       |
| 323 | ....Equalizer                                 | 512 | ....Logarithmic format  |
| 400 | ..Transform                                   | 513 | ....Variable length or precision                                |
| 401 | ...Multidimensional                           | 514 | ....Matrix array  |
| 402 | ...Discrete Cosine Transform<br>(i.e., DCT)   | 517 | ....Logarithmic format  |
| 403 | ...Fourier                                    | 518 | ....Variable length   |
| 404 | ....Fast Fourier Transform (i.e., FFT)        | 519 | ...Negative radix   |
| 405 | ....Discrete Fourier Transform<br>(i.e., DFT) | 520 | ...Matrix array   |
| 406 | ....Pipeline                                  | 521 | ...Pipeline   |
| 407 | ....Systolic                                  | 522 | ...Systolic   |
| 408 | ....Radix greater than two                    | 523 | ...Multiplication followed by addition (i.e., $x \cdot y + z$ ) |
| 409 | ....Butterfly circuit                         | 524 | ...Multiple parallel operations                                 |
| 410 | ...Walsh                                      | 525 | ...Status condition/flag generation or use                      |
| 420 | ..Convolution                                 | 530 | ...Error detection or correction                                |
| 421 | ...Cyclic/circular                            | 531 | ....Parity check  |
| 422 | ..Correlation                                 | 532 | ....Residue code  |
| 423 | ...Single bit data                            | 533 | ....Sequential repetition                                       |
| 424 | ...Multidimensional data                      | 534 | ....Plural parallel devices                                     |
| 425 | ...Using tapped delay line                    | 540 | ...Cathode-ray tube   |
| 426 | ...Autocorrelation                            | 541 | ...Contact-making device  |

|     |   |     |   |
|-----|---|-----|---|
| 542 | ....Radix point control   | 704 | .....For precharging (e.g., Manchester, etc.)         |
| 550 | ....Compensation for finite word length                                       | 705 | .....Serial   |
| 551 | ....Round off or truncation   | 706 | .....Parallel   |
| 552 | ....Overflow or underflow   | 707 | .....Carry-ripple                                     |
| 553 | ....Prediction  | 708 | .....Carry-save adders                                |
| 603 | ....Sum of products generation  | 709 | .....Adding more than two numbers                     |
| 604 | ....All four basic functions  | 710 | .....Carry look-ahead                                 |
| 605 | ....Evaluation of root  | 711 | .....Slice block having block ripple                  |
| 606 | ....Evaluation of powers  | 712 | .....Slice block having block look-ahead              |
| 607 | ....Multiplication of matrices  | 713 | .....Tree structured logic blocks                     |
| 620 | ....Multiplication  | 714 | .....Conditional sums                                 |
| 622 | ....Complex number format   | 800 | <b>ELECTRICAL ANALOG CALCULATING COMPUTER</b>         |
| 623 | ....Decimal   | 801 | .Particular function performed                        |
| 624 | ....Coded decimal   | 802 | ..Evaluation of equation                              |
| 625 | ....Binary  | 803 | ...Simultaneous                                       |
| 626 | ....Sum of cross products   | 804 | ...Differential (e.g., differential analyzer)         |
| 627 | ....Repeated addition   | 805 | ..Averaging   |
| 628 | ....Multiple digit  | 806 | ..Variance or standard deviation determination        |
| 629 | .....Carry-save adders (i.e., CSAs)   | 807 | ..Evaluation of root (e.g., square root)              |
| 630 | .....Array adders   | 808 | ..Evaluation of powers                                |
| 631 | .....Pipeline   | 809 | ..Coordinate conversion or vector resolver            |
| 632 | .....Feedback   | 810 | ...Electromechanical                                  |
| 650 | ...Division   | 811 | ..Evaluation of trigonometric function                |
| 651 | ....Decimal   | 812 | ...Single triangle                                    |
| 652 | ....Coded decimal   | 813 | ..Correlation or convolution                          |
| 653 | ....Binary  | 814 | ...Of multidimensional data                           |
| 654 | ....Multiplication by reciprocal  | 815 | ...Acoustic   |
| 655 | ....Repeated subtraction  | 816 | ...Optical  |
| 656 | ....Multiples of divisor  | 817 | ...Magnetic or electromagnetic                        |
| 670 | ...Addition/subtraction   | 818 | ...Having tapped delay line                           |
| 671 | ....Comparison  | 819 | ..Filtering   |
| 672 | ....Incrementation/decrementation   | 820 | ..Transform   |
| 673 | ....Radix correction  | 821 | ...Fourier  |
| 674 | ....Serial  | 822 | ..Differentiation                                     |
| 675 | ....Signal amplitude  | 823 | ..Integrator  |
| 676 | ....Microwave   | 824 | ...Plural integration                                 |
| 677 | ....Cryogenic   | 825 | ...Plural mode (e.g., plural scale)                   |
| 678 | ....By electronic tube  | 826 | ..Reset   |
| 679 | ....Magnetic  | 827 | ..Drift correction                                    |
| 680 | ....Decimal   | 828 | ..Having simultaneous calculation of another function |
| 681 | ....Serial  |     |   |
| 682 | ....Parallel  |     |   |
| 683 | ....Coded decimal   |     |   |
| 684 | ....Serial  |     |   |
| 685 | ....Parallel  |     |   |
| 700 | ....Binary  |     |   |
| 701 | ....Bipolar junction transistor only or combined with Field-Effect Transistor |     |   |
| 702 | ....Field-Effect transistor (FET)   |     |   |
| 703 | ....Gate functional level   |     |   |

829     ...Having a voltage to frequency converter  
830     ...Electromechanical  
831     ...Electro-optical  
832     ...Magnetic or electromagnetic  
833     ...Amplifier with additional feedback loop  
834     ....Additional R/C feedback loop  
835     ...Multiplication  
836     ...Time division  
837     ...Quarter-square  
838     ...Having charging or discharging of energy storage device  
839     ...Photomultiplier  
840     ...Electromagnetic  
841     ....Hall effect  
842     ...Electromechanical (e.g., servo-multiplier)  
843     ...With alternative division  
844     ..Division  
845     ..Function generation  
846     ...Piece-wise linear synthesis  
847     ....Interpolation/extrapolation  
848     ....Diode breakpoint  
849     ...Cathode-ray tube  
850     ...Two or more variables  
851     ...Logarithmic/exponential  
852     ...Triangular, sawtooth, or ramp  
853     ...Hyperbolic  
854     ...Electromechanical

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