ECLA   EUROPEAN CLASSIFICATION

G06G   **ANALOGUE COMPUTERS** (analogue optical computing devices G06E3/00)

G06G1/00   **Hand manipulated computing devices** (planimeters G01B5/26)

G06G1/00B	. [N: characterised by a specific application]
G06G1/00B1	. . [N: for medical purposes, for biological purposes]
G06G1/00B2	. . [N: for computing periodic phenomena e.g. fertility periods]
G06G1/00B3	. . [N: for civil engineering]
G06G1/00B4	. . [N: for machining]
G06G1/00B5	. . [N: for hydraulics]
G06G1/00B6	. . [N: for electricity, for electronics]
G06G1/00B7	. . [N: for optics, for photography]
G06G1/00B8	. . [N: for printing]
G06G1/00B9	. . [N: for air navigation or sea navigation]
G06G1/00B10	. . [N: for gun laying, for bomb aiming]
G06G1/00B11	. . [N: for calculating fuel consumption]
G06G1/00B12	. . [N: for conversion from one unit system to another, e.g. from British to metric]
G06G1/00B13	. . [N: for commerce, bank or invoicing]
G06G1/00B13B	. . . [N: for calculating interests]
G06G1/00B13C	. . . [N: for calculating earned incomes]
G06G1/00B13D	. . . [N: for calculating taxes]
G06G1/00B14	. . [N: for trigonometric computations]
G06G1/02	. Devices in which computing is effected by adding, substracting, or comparing lengths of parallel or concentric graudated scales [N: (G06G1/00B takes precedence)]
G06G1/02B	. . [N: decimal point positioning devices]
G06G1/04	. . characterised by construction (G06G1/10 takes precedence)
G06G1/04B	. . . [N: with scales borne by bands]
G06G1/06	. . . with rectilinear scales, e.g. slide rule
G06G1/06B	. . . . [N: construction of the cursor]
G06G1/08	. . . with circular or helical scales
G06G1/08B	. . . . [N: borne by a cylinder]
G06G1/10	. . characterised by the graduation
G06G1/10B	. . . [N: linear graduations]
G06G1/12	. . . Logarithmic graduations, e.g. for multiplication
G06G1/14	. in which a straight or curved line has to be drawn from given points on one or more input scales to one or more points on a result scale
G06G1/16	. in which a straight or curved line has to be drawn through related points on one or more families of curves

G06G3/00   **Devices in which the computing operation is performed mechanically** (G06G1/00 takes precedence)

G06G3/02   . for performing additions or subtractions, e.g. differential gearing

G06G3/04   . for performing multiplication or divisions, e.g. variable-ratio gearing

G06G3/06   . for evaluating functions by using cams and cam followers

G06G3/08   . for integrating or differentiating, e.g. by wheel and disc

G06G3/10   . for simulating specific processes, systems, or devices

G06G5/00   **Devices in which the computing operation is performed by means of fluid-pressure elements** (such elements in general F15C)

G06G7/00   **Devices in which the computing operation is performed by varying electric or magnetic quantities**

G06G7/02   . Details not covered by G06G7/04 to G06G7/10, [N: e.g. monitoring, construction, maintenance]

G06G7/04   . input or output devices (graph readers G06K11/00; function plotters, co-ordinate plotters G06K15/22, [N: G09G3/00B])

G06G7/06   . Programming arrangements, e.g. plugboard for interconnecting functional units of the computer; Digital programming [N: hybrid computers G06J]

G06G7/10   . Power supply arrangements

G06G7/12   . Arrangements for performing computing operations, e.g. operational amplifiers (amplifiers in general H03F; [N: adapted for telemeasuring or for indicating or recording the results of the measurement G01D1/10, G01D1/16; for fuzzy computing G06N7/02]) [C0010]

G06G7/122   . . for optimisation, e.g. least square fitting, linear programming, critical path analysis, gradient method

G06G7/14   . . for addition or subtraction (of vector quantities G06G7/22) [N: computing the average by addition; differential amplifiers H03F3/45]

G06G7/16   . . for multiplication or division [N: G06G7/19 and G06G7/24 take precedence measuring electric power G01R21/00]

G06G7/161   . . . with pulse modulation, e.g. modulation of amplitude, width, frequency, phase or form [N: pulse modulators H03K7/00]

G06G7/162   . . . using galvano- magnetic effects, e.g. Hall effect; using similar magnetic effects

G06G7/163   . . . using a variable impedance controlled by one of the input signals, variable amplification or transfer function [N: G06G7/161, G06G7/162 take precedence]

G06G7/164   . . . using means for evaluating powers, e.g. quarter square multiplier (evaluating powers G06G7/20)

G06G7/18   . . for integration or differentiation; for forming integrals (G06G7/19 takes precedence)

G06G7/18D   . . . [N: with respect to a variable other than time]

G06G7/18G	. . .	[N: using electrochemical elements, e.g. solion]
G06G7/182	. . .	using magnetic elements
G06G7/184	. . .	using capacitative elements
G06G7/186	. . . .	using an operational amplifier comprising a capacitor or a resistor in the feedback loop
G06G7/186C	. . . . .	[N: with initial condition setting]
G06G7/188	. . .	using electromechanical elements
G06G7/19	. .	for forming integrals of products, e.g. Fourier integrals, Laplace integrals, correlation integrals; for analysis or synthesis of functions using orthogonal functions (Fourier or spectrum analysis G01R23/16; sound analysis or synthesis G10L)
G06G7/19C	. . .	[N: using charge transfer devices]
G06G7/19D	. . .	[N: using a magnetic medium, a linear filter]
G06G7/19F	. . .	[N: for forming Fourier integrals, harmonic analysis and synthesis (spectrum analysis G01R23/00; G01R7/195 and G01R7/19C take precedence)]
G06G7/19G	. . .	[N: for forming correlation integrals; for forming convolution integrals (G06G7/195, G06G7/19C and G06G7/19D take precedence)]
G06G7/19G1	. . . .	[N: by converting at least one the input signals into a two level signal, e.g. polarity correlators]
G06G7/19H	. . .	[N: for forming other integrals of product, e.g. orthogonal functions, Laplace, Laguerre, Walsh, Hadamard, Hilbert (G06G7/195, G06G7/19C and G06G7/19D take precedence)]
G06G7/195	. . .	using electro- acoustic elements
G06G7/20	. .	for evaluating powers, roots, polynomes, mean square values, standard deviation (G06G7/122, G06G7/28 take precedence; gamma correction in television systems H04N5/20, H04N9/69)
G06G7/22	. .	for evaluating trigonometric functions; for conversion of co-ordinates; for computations involving vector quantities (trigonometric computations using simultaneous equations G06G7/34 [N: for computations in the complex plane; G06G7/20, G06G7/28 take precedence; resolvers 74C5A1])
G06G7/24	. .	for evaluating logarithmic or exponential functions, e.g. hyperbolic functions [N: for multiplication, division or for evaluating powers or roots using logarithmic functions; gamma correction in television systems H04N5/20, H04N9/69]
G06G7/25	. .	for discontinuous functions, e.g. backlash, dead zone, limiting absolute value or peak value [N: measuring the maximum value of currents or voltages G01R19/30]
G06G7/26	. .	Arbitrary function generators [N: using Fourier series or other orthogonal functions G06G7/19; using curve followers G06K11/02]
G06G7/28	. . .	for synthesising functions by piece-wise approximation
G06G7/30	. .	for interpolation or extrapolation (G06G7/122 takes precedence)
G06G7/32	. .	for solving of equations [N: or inequations; for matrices]
G06G7/34	. . .	of simultaneous equations (G06G7/122 takes precedence)
G06G7/36	. . .	of single equations of quadratic or higher degree (G06G7/22, G06G7/24 take precedence)
G06G7/38	. . .	of differential or integral equations
G06G7/40	. . . .	of partial differential equations [N: of field or wave equations] (simulating specific devices G06G7/48)
G06G7/42	. . . . .	using electrolytic tank
G06G7/44	. . . . .	using continuous medium, current-sensitive paper

G06G7/46 . . . . . using discontinuous medium, e.g. resistance network

G06G7/48 . Analogue computers for specific processes, systems or devices, e.g. simulators

G06G7/48C . . [N: for determining the trajectory of particles, e.g. of electrons (measurement performed on radiation beams G01T1/29; processing or analysing tracks of particles G01T5/02)]

G06G7/50 . . for distribution networks, e.g. for fluids (G06G7/62 takes precedence)

[N: **WARNING**
This group is empty; see G06G7/57 [N1208]
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G06G7/52 . . for economic systems; for statistics (G06G7/122, G06G7/19 take precedence)

G06G7/54 . . for nuclear physics, e.g. nuclear reactors, radioactive fall [N: (processing of scintigraphic or other radio-isotope data G01T1/164B7, G01T1/29D9)]

G06G7/56 . . for heat flow (G06G7/58 takes precedence)

G06G7/57 . . for fluid flow (G06G7/50 takes precedence); [N: for distribution networks]

G06G7/58 . . for chemical processes (G06G7/75 takes precedence); [N: for physico-chemical processes; for metallurgical processes]

G06G7/60 . . for living beings, e.g. their nervous systems; [N: for problems in the medical field]

G06G7/62 . . for electric systems or apparatus [N: (G06G7/78 takes precedence)]

[N: **Notes**
This group covers only computers specially adapted for electronic systems or devices [N1208]
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G06G7/625 . . . for filters; for delay lines ([N: measuring characteristics of electric networks, e.g. plotting Nyquist diagram G01R27/28])

G06G7/63 . . . for power apparatus, e.g. motors, or supply distribution networks [N: (for control systems of electric power apparatus G06G7/66)]

G06G7/635 . . . . for determining the most economical distribution in power systems

G06G7/64 . . for non-electric machines, e.g. turbine

G06G7/66 . . for control systems [N: (for optimisation G06G7/122)]

G06G7/68 . . for civil engineering structures, e.g. beam, strut, girder, [N: elasticity computation]

G06G7/70 . . for vehicles, e.g. to determine permissible loading of ships, [N: centre of gravity, necessary fuel]

G06G7/72 . . . Flight simulator (link trainers G09B9/00)

G06G7/75 . . for component analysis, e.g. of mixtures, of colours (G06G7/122 takes precedence; [N: gas chromatography G01N30/00])

G06G7/76 . . for traffic

G06G7/78 . . for direction-finding, locating, distance or velocity measuring, or navigation systems

G06G7/80 . . for gunlaying; for bomb aiming; for guiding missiles

G06G99/00 **Subject matter not provided for in other groups of this subclass** [N0902]