

CPC COOPERATIVE PATENT CLASSIFICATION

G PHYSICS (NOTES omitted)

INSTRUMENTS

G09 EDUCATION; CRYPTOGRAPHY; DISPLAY; ADVERTISING; SEALS

G09B EDUCATIONAL OR DEMONSTRATION APPLIANCES; APPLIANCES FOR TEACHING, OR COMMUNICATING WITH, THE BLIND, DEAF OR MUTE; MODELS; PLANETARIA; GLOBES; MAPS; DIAGRAMS (devices for psychotechnics or for testing reaction times [A61B 5/16](#); games, sports, amusements [A63](#); projectors, projector screens [G03B](#))

NOTES

1. This subclass covers:
 - simulators regarded as teaching or training devices, which is the case if they give perceptible sensations having a likeness to the sensations a student would experience in reality in response to actions taken by him;
 - models of buildings, installations, or the like.
2. This subclass does not cover:
 - simulators which demonstrate, by means involving computing, the function of apparatus or of a system, which are covered by class [G06](#), if no provision exists elsewhere
 - components of simulators, if identical with real devices or machines, which are covered by the relevant subclasses for these devices or machines (and not by class [G09](#)).

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

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| 1/00 | Manually or mechanically operated educational appliances using elements forming, or bearing, symbols, signs, pictures, or the like which are arranged or adapted to be arranged in one or more particular ways (puzzle-games A63F 9/00 ; advertising or displaying in general G09F) | 1/26 | • . . . the elements being arranged in fan form |
| | | 1/28 | • . . . the elements being slidable |
| | | 1/30 | • . wherein the elements are adapted to be arranged in co-operation with the support to form symbols (without special support G09B 1/40) |
| 1/02 | • and having a support carrying or adapted to carry the elements | 1/32 | • comprising elements to be used without a special support |
| 1/04 | • . the elements each bearing a single symbol or a single combination of symbols | 1/325 | • {the elements comprising interacting electronic components} |
| 1/06 | • . . and being attachable to, or mounted on, the support | 1/34 | • . the elements to be placed loosely in adjacent relationship |
| 1/08 | • . . . by means of magnets | 1/36 | • . the elements being connectible by corresponding projections and recesses |
| 1/10 | • . . . by means of pins and holes | 1/38 | • . the elements being connectible magnetically |
| 1/12 | • . . . by means of ring-like securing elements (sheets temporarily attached together by rings or coils B42F 3/00 , G09B 5/00) | 1/40 | • . to form symbols or signs by appropriate arrangement |
| 1/14 | • . . . the elements being slidably mounted on the support | 3/00 | Manually or mechanically operated teaching appliances working with questions and answers (electrically-operated G09B 7/00 ; {e.g. G09B 7/063 } advertising or displaying in general G09F) |
| 1/16 | • . the elements each bearing a plurality of different symbols, signs, or combinations of symbols and signs, only one symbol, sign, or combination thereof, of each element to be used at a time | 3/02 | • of the type wherein the student is expected to construct an answer to the question which is presented or wherein the machine gives an answer to the question presented by a student |
| 1/18 | • . . the elements being rotatable | 3/04 | • . of chart form (masks G09B 17/02) |
| 1/20 | • . . . and bearing the symbols on a surface parallel to the axis of rotation | 3/045 | • . . {with invisibly printed correct answer; the answer being rendered visible by special optical means, e.g. filters; mirrors} |
| 1/22 | • . . . and bearing the symbols on a surface perpendicular to the axis of rotation | | |
| 1/24 | • . . the elements being in flexible strip form, e.g. endless bands | | |

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| 3/06 | <ul style="list-style-type: none"> of the multiple-choice answer type, i.e. where a given question is provided with a series of answers and a choice has to be made | 7/07 | <ul style="list-style-type: none"> providing for individual presentation of questions to a plurality of student stations |
| 3/08 | <ul style="list-style-type: none"> of chart form (having one set of answers common to a plurality of questions G09B 3/12) | 7/073 | <ul style="list-style-type: none"> all student stations being capable of presenting the same questions simultaneously |
| 3/085 | <ul style="list-style-type: none"> {with invisibly printed correct answer; the answer being rendered visible by special optical means, e.g. filters; mirrors} | 7/077 | <ul style="list-style-type: none"> different stations being capable of presenting different questions simultaneously |
| 3/10 | <ul style="list-style-type: none"> wherein one set of answers is common to a plurality of questions | 7/08 | <ul style="list-style-type: none"> characterised by modifying the teaching programme in response to a wrong answer, e.g. repeating the question, supplying further information |
| 3/12 | <ul style="list-style-type: none"> of chart form | 7/10 | <ul style="list-style-type: none"> wherein a set of answers is common to a plurality of questions |
| 5/00 | Electrically-operated educational appliances (working with questions and answers G09B 7/00 ; simulators G09B 9/00 ; advertising or displaying in general G09F) | 7/12 | <ul style="list-style-type: none"> characterised by modifying the teaching programme in response to a wrong answer, e.g. repeating the question, supplying further information |
| NOTE | | 9/00 | Simulators for teaching or training purposes (for the use of weapons F41 ; computing aspects G06 ; protocols for games, networked simulations or virtual reality H04L 67/131) |
| Group G09B 5/08 takes precedence over groups G09B 5/02 - G09B 5/06 . | | 9/003 | <ul style="list-style-type: none"> {for military purposes and tactics} |
| 5/02 | <ul style="list-style-type: none"> with visual presentation of the material to be studied, e.g. using film strip | 9/006 | <ul style="list-style-type: none"> {for locating or ranging of objects} |
| 5/04 | <ul style="list-style-type: none"> with audible presentation of the material to be studied (reading and recognising printed or written characters G06K 9/00; sound recording or reproducing G11B) | 9/02 | <ul style="list-style-type: none"> for teaching control of vehicles or other craft |
| 5/06 | <ul style="list-style-type: none"> with both visual and audible presentation of the material to be studied | 9/04 | <ul style="list-style-type: none"> for teaching control of land vehicles |
| 5/062 | <ul style="list-style-type: none"> {Combinations of audio and printed presentations, e.g. magnetically striped cards, talking books, magnetic tapes with printed texts thereon} | 9/042 | <ul style="list-style-type: none"> providing simulation in a real vehicle (G09B 9/052, G09B 9/058 take precedence) |
| 5/065 | <ul style="list-style-type: none"> {Combinations of audio and video presentations, e.g. videotapes, videodiscs, television systems} | 9/048 | <ul style="list-style-type: none"> a model being viewed and manoeuvred from a remote point (G09B 9/052, G09B 9/058 take precedence) |
| 5/067 | <ul style="list-style-type: none"> {Combinations of audio and projected visual presentation, e.g. film, slides} | 9/05 | <ul style="list-style-type: none"> the view from a vehicle being simulated (G09B 9/052, G09B 9/058 take precedence) |
| 5/08 | <ul style="list-style-type: none"> providing for individual presentation of information to a plurality of student stations | 9/052 | <ul style="list-style-type: none"> characterised by provision for recording or measuring trainee's performance (devices for psychotechnics, e.g. for vehicle drivers A61B 5/16, A61B 5/18) |
| 5/10 | <ul style="list-style-type: none"> all student stations being capable of presenting the same information simultaneously (G09B 5/14 takes precedence) | 9/058 | <ul style="list-style-type: none"> for teaching control of cycles or motorcycles |
| 5/12 | <ul style="list-style-type: none"> different stations being capable of presenting different information simultaneously (G09B 5/14 takes precedence) | 9/06 | <ul style="list-style-type: none"> for teaching control of ships, boats, or other waterborne vehicles |
| 5/125 | <ul style="list-style-type: none"> {the stations being mobile} | 9/063 | <ul style="list-style-type: none"> {by using visual displays} |
| 5/14 | <ul style="list-style-type: none"> with provision for individual teacher-student communication | 9/066 | <ul style="list-style-type: none"> {Sailing; Surfing} |
| 7/00 | Electrically-operated teaching apparatus or devices working with questions and answers (mechanically operated G09B 3/00 ; computing arrangements G06F) | 9/08 | <ul style="list-style-type: none"> for teaching control of aircraft, e.g. Link trainer |
| 7/02 | <ul style="list-style-type: none"> of the type wherein the student is expected to construct an answer to the question which is presented or wherein the machine gives an answer to the question presented by a student | 9/085 | <ul style="list-style-type: none"> {Special purpose teaching, e.g. lighting on water, aerial photography} |
| 7/04 | <ul style="list-style-type: none"> characterised by modifying the teaching programme in response to a wrong answer, e.g. repeating the question, supplying a further explanation | 9/10 | <ul style="list-style-type: none"> with simulated flight- or engine-generated force being applied to aircraft occupant (G09B 9/28 takes precedence) |
| 7/06 | <ul style="list-style-type: none"> of the multiple-choice answer-type, i.e. where a given question is provided with a series of answers and a choice has to be made from the answers | 9/12 | <ul style="list-style-type: none"> Motion systems for aircraft simulators |
| 7/063 | <ul style="list-style-type: none"> {with hand-placed probe or plug} | 9/14 | <ul style="list-style-type: none"> controlled by fluid actuated piston or cylinder ram |
| 7/066 | <ul style="list-style-type: none"> {with answer indicating cards, blocks} | 9/16 | <ul style="list-style-type: none"> Ambient or aircraft conditions simulated or indicated by instrument or alarm |
| | | 9/165 | <ul style="list-style-type: none"> {Condition of cabin, cockpit or pilot's accessories} |
| | | 9/18 | <ul style="list-style-type: none"> Condition of engine or fuel supply |
| | | 9/20 | <ul style="list-style-type: none"> Simulation or indication of aircraft attitude |
| | | 9/203 | <ul style="list-style-type: none"> {for taking-off or landing condition} |
| | | 9/206 | <ul style="list-style-type: none"> {for in-flight condition} |
| | | 9/22 | <ul style="list-style-type: none"> including aircraft sound simulation |
| | | 9/24 | <ul style="list-style-type: none"> including display or recording of simulated flight path |
| | | 9/245 | <ul style="list-style-type: none"> {Simulation of compasses, gyroscopes} |
| | | 9/26 | <ul style="list-style-type: none"> Simulation of radio-navigation |
| | | 9/28 | <ul style="list-style-type: none"> Simulation of stick forces or the like |

- 9/30 . . . Simulation of view from aircraft
- NOTE**
- When classifying in groups [G09B 9/301](#), [G09B 9/302](#), [G09B 9/304](#), [G09B 9/305](#), classification is also made in other appropriate groups [G09B 9/307](#), [G09B 9/308](#), [G09B 9/32](#), [G09B 9/323](#), [G09B 9/326](#), [G09B 9/34](#), [G09B 9/36](#), [G09B 9/38](#) if of interest
- 9/301 {by computer-processed or -generated image}
- 9/302 {the image being transformed by computer processing, e.g. updating the image to correspond to the changing point of view}
- 9/304 {by using a film}
- 9/305 {by viewing with a camera a small-scale model of the terrain}
- 9/307 {by helmet-mounted projector or display ([G09B 9/36](#) takes precedence; optical parts of head-up displays [G02B 27/01](#))}
- 9/308 {by LCD, gas plasma display or electroluminescent display}
- 9/32 by projected image ({[G09B 9/307](#), } [G09B 9/36](#) take precedence)
- 9/323 {the projection screen being made of LCD panels ([G09B 9/307](#) takes precedence)}
- 9/326 {the image being transformed by optical means}
- 9/34 by cathode-ray screen display ({[G09B 9/307](#), } [G09B 9/36](#) take precedence)
- 9/36 Simulation of night or reduced visibility flight
- 9/38 Simulation of runway outlining or approach lights
- 9/40 . . . Simulation of airborne radar
- 9/42 . . . Aircraft, aircraft simulator or means connected thereto, travelling on the ground or water during simulated flight training
- 9/44 . . . providing simulation in a real aircraft flying through the atmosphere without restriction of its path
- 9/46 . . . the aircraft being a helicopter
- 9/48 . . . a model being viewed and manoeuvred from a remote point
- 9/50 . . . Automatically directing the course of the aircraft
- 9/52 . . for teaching control of an outer space vehicle
- 9/54 . Simulation of radar ([G09B 9/40](#) takes precedence)
- 9/56 . Simulation of sonar

11/00 Teaching hand-writing, shorthand, drawing, or painting

- 11/02 . Finger, hand or arm supporting devices
- 11/04 . Guide sheets or plates; Tracing charts ([templates for drawing purposes B43L 13/20](#))
- 11/06 . Devices involving the use of transparent or translucent tracing material, e.g. copy books
- 11/08 . Teaching shorthand
- 11/10 . Teaching painting

13/00 Teaching typing

- 13/02 . Dummy practice keyboard apparatus ([for teaching music G09B 15/08](#))

- 13/04 . Devices used in association with a real typewriter, teleprinter, or the like

15/00 Teaching music (metronomes [G04F 5/02](#))

- 15/001 . {Boards or like means for providing an indication of chords}
- 15/002 . . {Electrically operated systems}
- 15/003 . . . {with indication of the keys or strings to be played on instruments}
- 15/004 . . {Non-electrically operated systems}
- 15/005 . . . {of the slide type}
- 15/006 {with indication of the keys or strings to be played on instruments}
- 15/007 . . . {using disc-shaped boards}
- 15/008 {with indication of the keys or strings to be played on instruments}
- 15/009 . {Transposing devices}
- 15/02 . Boards or like means for providing an indication of notes
- 15/023 . . {Electrically operated}
- 15/026 . . {Non-electrically operated}
- 15/04 . . with sound emitters
- 15/06 . Devices for exercising or strengthening fingers or arms; Devices for holding fingers or arms in a proper position for playing ([for teaching typing G09B 13/00](#); exercising apparatus for developing or strengthening the muscles for physical training [A63B 21/00](#), [A63B 23/00](#))
- 15/08 . Practice keyboards ([for teaching typing G09B 13/02](#))

17/00 Teaching reading (teaching lip-reading [G09B 21/00](#))

- 17/003 . {electrically operated apparatus or devices}
- 17/006 . . {with audible presentation of the material to be studied ([audio and audio-visual teaching apparatus in general G09B 5/04](#), [G09B 5/06](#))}
- 17/02 . Line indicators or other guides or masks
- 17/04 . for increasing the rate of reading; Reading rate control

19/00 Teaching not covered by other main groups of this subclass (teaching or practice apparatus for gun-aiming or gun-laying [F41G 3/26](#))

- 19/0007 . {Signalling}
- 19/0015 . {Dancing}
- 19/0023 . {Colour matching, recognition, analysis, mixture or the like}
- 19/003 . {Repetitive work cycles; Sequence of movements}
- 19/0038 . . {Sports}
- 19/0046 . {History}
- 19/0053 . {Computers, e.g. programming}
- 19/0061 . {Geography}
- 19/0069 . {Engineering, e.g. mechanical, electrical design ([computer engineering G09B 19/0053](#))}
- 19/0076 . {Body hygiene; Dressing; Knot tying}
- 19/0084 . . {Dental hygiene}
- 19/0092 . {Nutrition}
- 19/02 . Counting; Calculating ([abacus G06C 1/00](#))
- 19/025 . . {with electrically operated apparatus or devices}
- 19/04 . Speaking ([with audible presentation of the material to be studied G09B 5/04](#))
- 19/06 . Foreign languages ([with audible presentation of material to be studied G09B 5/04](#))
- 19/08 . . Printed or written appliances, e.g. text books, bilingual letter assemblies, charts

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| 19/10 | . Modelling | 23/16 | . . for science of heat |
| 19/12 | . Clock-reading | 23/18 | . . for electricity or magnetism |
| 19/14 | . Traffic procedures, e.g. traffic regulations | 23/181 | . . . {for electric and magnetic fields; for voltages; for currents} |
| 19/16 | . Control of vehicles or other craft (simulators G09B 9/02) | 23/182 | . . . {for components} |
| 19/162 | . . {Control of ships, boats, or other waterborne vehicles} | 23/183 | . . . {for circuits} |
| 19/165 | . . {Control of aircraft} | 23/185 | {for building block systems} |
| 19/167 | . . {Control of land vehicles} | 23/186 | {for digital electronics; for computers, e.g. microprocessors} |
| 19/18 | . Book-keeping or economics | 23/187 | . . . {for measuring instruments} |
| 19/20 | . Needlework | 23/188 | . . . {for motors; for generators; for power supplies; for power distribution} |
| 19/22 | . Games, e.g. card games | 23/20 | . . for atomic physics or nucleonics |
| 19/24 | . Use of tools | 23/22 | . . for optics |
| 19/26 | . Dot-and dash telegraphic codes | 23/24 | . for chemistry |
| 21/00 | Teaching, or communicating with, the blind, deaf or mute (audible presentation of material to be studied G09B 5/04 ; devices or methods for replacing direct visual or auditory perception by another kind of perception A61F 9/08 , A61F 11/04 ; audible indication of meter readings or of colour G01D 7/12 ; watches for blind persons G04B 25/02 ; methods or arrangements for reading or recognising printed or written characters G06K 9/00 ; speech analysis, speech recognition G10L ; sound-recording or reproducing, per se G11B) | 23/26 | . for molecular structures; for crystallography |
| 21/001 | . {Teaching or communicating with blind persons (G09B 21/02 - G09B 21/06 take precedence)} | 23/28 | . for medicine |
| 21/002 | . . {Writing aids for blind persons (devices for Braille writing G09B 21/02)} | 23/281 | . . {for pregnancy, birth or obstetrics (G09B 23/286 takes precedence)} |
| 21/003 | . . {using tactile presentation of the information, e.g. Braille displays} | 23/283 | . . {for dentistry or oral hygiene (G09B 23/286 takes precedence)} |
| 21/004 | . . . {Details of particular tactile cells, e.g. electro-mechanical or mechanical layout} | 23/285 | . . {for injections, endoscopy, bronchoscopy, sigmoidoscopy, insertion of contraceptive devices or enemas} |
| 21/005 | . . . {Details of specially-adapted software to access information, e.g. to browse through hyperlinked information} | 23/286 | . . {for scanning or photography techniques, e.g. X-rays, ultrasonics} |
| 21/006 | . . {using audible presentation of the information} | 23/288 | . . {for artificial respiration or heart massage} |
| 21/007 | . . {using both tactile and audible presentation of the information} | 23/30 | . Anatomical models |
| 21/008 | . . {using visual presentation of the information for the partially sighted} | 23/303 | . . . {specially adapted to simulate circulation of bodily fluids} |
| 21/009 | . {Teaching or communicating with deaf persons (G09B 21/04 takes precedence; deaf and dumb persons G09B 21/00)} | 23/306 | . . . {comprising real biological tissue} |
| 21/02 | . Devices for Braille writing (typewriters for Braille B41J 3/32) | 23/32 | . . . with moving parts |
| 21/025 | . . {wherein one tactile input is associated to a single finger} | 23/34 | . . . with removable parts |
| 21/04 | . Devices for conversing with the deaf-blind | 23/36 | . for zoology |
| 21/06 | . Devices for teaching lip-reading | 23/38 | . for botany |
| 23/00 | Models for scientific, medical, or mathematical purposes, e.g. full-sized devices for demonstration purposes (in the nature of toys A63H) | 23/40 | . for geology |
| 23/02 | . for mathematics (for statics or dynamics G09B 23/08) | 25/00 | Models for purposes not provided for in G09B 23/00, e.g. full-sized devices for demonstration purposes (model vehicles, tracks therefor, models in the nature of toys A63H) |
| 23/04 | . . for geometry, trigonometry, projection or perspective (for surveying G09B 25/06) | 25/02 | . of industrial processes; of machinery |
| 23/06 | . for physics | 25/025 | . . {hydraulic; pneumatic} |
| 23/08 | . . for statics or dynamics | 25/04 | . of buildings |
| 23/10 | . . . of solid bodies | 25/06 | . for surveying; for geography, e.g. relief models (globes G09B 27/00 ; maps G09B 29/00) |
| 23/12 | . . . of liquids or gases | 25/08 | . of scenic effects, e.g. trees, rocks, water surfaces (for stage purposes A63J 1/00) |
| 23/14 | . . for acoustics | 27/00 | Planetaria; Globes |
| | | 27/02 | . Tellurions; Orreries |
| | | 27/04 | . Star maps |
| | | 27/06 | . Celestial globes |
| | | 27/08 | . Globes (celestial globes G09B 27/06) |
| | | 29/00 | Maps; Plans; Charts; Diagrams, e.g. route diagram (star maps G09B 27/04 ; devices for holding or supporting maps A47B 97/02 ; for computing purposes G06G 1/14 , G09B 1/16 ; display boards G09F) |
| | | 29/001 | . {Planning boards} |
| | | 29/002 | . . {using magnetic elements} |
| | | 29/003 | . {Maps} |

G09B

- 29/004 . . {Map manufacture or repair; Tear or ink or water resistant maps; Long-life maps ([printing processes for maps B41M 3/02](#); by permanently attaching map sections to sheets [B42B 7/00](#))}
- 29/005 . . {Map projections or methods associated specifically therewith}
- 29/006 . . {Representation of non-cartographic information on maps, e.g. population distribution, wind direction, radiation levels, air and sea routes}
- 29/007 . . . {using computer methods}
- 29/008 . . . {Touring maps or guides to public transport networks}
- 29/02 . sectional
- 29/04 . . the sections being arranged in the form of a foldable sheet or sheets
- 29/06 . of belt form, e.g. endless belt
- 29/08 . Hanging maps or the like
- 29/10 . Map spot or coordinate position indicators; Map reading aids ([optical projection apparatus per se G03B](#))
- 29/102 . . {using electrical means}
- 29/104 . . . {involving the optical projection of slides, microfilm or the like}
- 29/106 . . {using electronic means}
- 29/108 . . . {involving the optical projection of slides, microfilm or the like}
- 29/12 . Relief maps ([relief models G09B 25/06](#))
- 29/14 . Local time charts