

# CPC COOPERATIVE PATENT CLASSIFICATION

## 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](#)).

|       |  |       |  |
|-------|--|-------|--|
| 1/00  | <b>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</b> ( <a href="#">puzzle-games A63F 9/00</a> ; <a href="#">advertising or displaying in general G09F</a> ) | 1/36  | . . the elements being connectible by corresponding projections and recesses   |
|       |  | 1/38  | . . the elements being connectible magnetically  |
|       |  | 1/40  | . . to form symbols or signs by appropriate arrangement  |
| 1/02  | . and having a support carrying or adapted to carry the elements   | 3/00  | <b>Manually or mechanically operated teaching appliances working with questions and answers</b> ( <a href="#">electrically-operated G09B 7/00</a> ; {e.g. <a href="#">G09B 7/063</a> } <a href="#">advertising or displaying in general G09F</a> ) |
| 1/04  | . . the elements each bearing a single symbol or a single combination of symbols   | 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  |
| 1/06  | . . . and being attachable to, or mounted on, the support  | 3/04  | . . of chart form ( <a href="#">masks G09B 17/02</a> )   |
| 1/08  | . . . . by means of magnets  | 3/045 | . . . {with invisibly printed correct answer; the answer being rendered visible by special optical means, e.g. filters; mirrors}   |
| 1/10  | . . . . by means of pins and holes   | 3/06  | . 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   |
| 1/12  | . . . . by means of ring-like securing elements ( <a href="#">sheets temporarily attached together by rings or coils B42F 3/00</a> , <a href="#">G09B 5/00</a> )   | 3/08  | . . of chart form ( <a href="#">having one set of answers common to a plurality of questions G09B 3/12</a> )   |
| 1/14  | . . . . the elements being slidably mounted on the support   | 3/085 | . . . {with invisibly printed correct answer; the answer being rendered visible by special optical means, e.g. filters; mirrors}   |
| 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   | 3/10  | . . wherein one set of answers is common to a plurality of questions   |
| 1/18  | . . . the elements being rotatable   | 3/12  | . . . of chart form  |
| 1/20  | . . . . and bearing the symbols on a surface parallel to the axis of rotation  | 5/00  | <b>Electrically-operated educational appliances</b> ( <a href="#">working with questions and answers G09B 7/00</a> ; <a href="#">simulators G09B 9/00</a> ; <a href="#">advertising or displaying in general G09F</a> )                            |
| 1/22  | . . . . and bearing the symbols on a surface perpendicular to the axis of rotation   |       | <b>NOTE</b>  |
| 1/24  | . . . the elements being in flexible strip form, e.g. endless bands  |       | Group <a href="#">G09B 5/08</a> takes precedence over groups <a href="#">G09B 5/02</a> - <a href="#">G09B 5/06</a> .   |
| 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 ( <a href="#">without special support G09B 1/40</a> )   | 5/02  | . with visual presentation of the material to be studied, e.g. using film strip  |
| 1/32  | . comprising elements to be used without a special support   |       |  |
| 1/325 | . . {the elements comprising interacting electronic components}  |       |  |
| 1/34  | . . the elements to be placed loosely in adjacent relationship   |       |  |

- 5/04 . with audible presentation of the material to be studied ([reading and recognising printed or written characters G06K 9/00](#); [sound recording or reproducing G11B](#))
- 5/06 . with both visual and audible presentation of the material to be studied
- 5/062 . . {Combinations of audio and printed presentations, e.g. magnetically striped cards, talking books, magnetic tapes with printed texts thereon}
- 5/065 . . {Combinations of audio and video presentations, e.g. videotapes, videodiscs, television systems}
- 5/067 . . {Combinations of audio and projected visual presentation, e.g. film, slides}
- 5/08 . providing for individual presentation of information to a plurality of student stations
- 5/10 . . all student stations being capable of presenting the same information simultaneously ([G09B 5/14 takes precedence](#))
- 5/12 . . different stations being capable of presenting different information simultaneously ([G09B 5/14 takes precedence](#))
- 5/125 . . . {the stations being mobile}
- 5/14 . . with provision for individual teacher-student communication
- 7/00 Electrically-operated teaching apparatus or devices working with questions and answers** ([mechanically operated G09B 3/00](#); [computing arrangements G06F](#))
- 7/02 . 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
- 7/04 . . characterised by modifying the teaching programme in response to a wrong answer, e.g. repeating the question, supplying a further explanation
- 7/06 . 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
- 7/063 . . {with hand-placed probe or plug}
- 7/066 . . {with answer indicating cards, blocks}
- 7/07 . . providing for individual presentation of questions to a plurality of student stations
- 7/073 . . . all student stations being capable of presenting the same questions simultaneously
- 7/077 . . . different stations being capable of presenting different questions simultaneously
- 7/08 . . characterised by modifying the teaching programme in response to a wrong answer, e.g. repeating the question, supplying further information
- 7/10 . . wherein a set of answers is common to a plurality of questions
- 7/12 . . . characterised by modifying the teaching programme in response to a wrong answer, e.g. repeating the question, supplying further information
- 9/00 Simulators for teaching or training purposes** ([for the use of weapons F41](#); [computing aspects G06](#); [protocols for networked simulations H04L 29/06034](#))
- 9/003 . {for military purposes and tactics}
- 9/006 . {for locating or ranging of objects}
- 9/02 . for teaching control of vehicles or other craft
- 9/04 . . for teaching control of land vehicles
- 9/042 . . . providing simulation in a real vehicle ([G09B 9/052](#), [G09B 9/058 take precedence](#))
- 9/048 . . . a model being viewed and manoeuvred from a remote point ([G09B 9/052](#), [G09B 9/058 take precedence](#))
- 9/05 . . . the view from a vehicle being simulated ([G09B 9/052](#), [G09B 9/058 take precedence](#))
- 9/052 . . . characterised by provision for recording or measuring trainee's performance ([devices for psychotechnics, e.g. for vehicle drivers A61B 5/16](#), [A61B 5/18](#))
- 9/058 . . . for teaching control of cycles or motorcycles
- 9/06 . . for teaching control of ships, boats, or other waterborne vehicles
- 9/063 . . . {by using visual displays}
- 9/066 . . . {Sailing; Surfing}
- 9/08 . . for teaching control of aircraft, e.g. Link trainer
- 9/085 . . . {Special purpose teaching, e.g. alighting on water, aerial photography}
- 9/10 . . . with simulated flight- or engine-generated force being applied to aircraft occupant ([G09B 9/28 takes precedence](#))
- 9/12 . . . Motion systems for aircraft simulators
- 9/14 . . . . controlled by fluid actuated piston or cylinder ram
- 9/16 . . . Ambient or aircraft conditions simulated or indicated by instrument or alarm
- 9/165 . . . . {Condition of cabin, cockpit or pilot's accessories}
- 9/18 . . . . Condition of engine or fuel supply
- 9/20 . . . . Simulation or indication of aircraft attitude
- 9/203 . . . . . {for taking-off or landing condition}
- 9/206 . . . . . {for in-flight condition}
- 9/22 . . . including aircraft sound simulation
- 9/24 . . . including display or recording of simulated flight path
- 9/245 . . . . {Simulation of compasses, gyroscopes}
- 9/26 . . . Simulation of radio-navigation
- 9/28 . . . 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}  | 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) |
| 9/32         | . . . . by projected image ({G09B 9/307,} G09B 9/36 take precedence)  | 15/08        | . Practive keyboards (for teaching typing G09B 13/02)   |
| 9/323        | . . . . . {the projection screen being made of LCD panels (G09B 9/307 takes precedence)}  | <b>17/00</b> | <b>Teaching reading</b> (teaching lip-reading G09B 21/00)   |
| 9/326        | . . . . . {the image being transformed by optical means}  | 17/003       | . {electrically operated apparatus or devices}  |
| 9/34         | . . . . by cathode-ray screen display ({G09B 9/307,} G09B 9/36 take precedence)   | 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)}   |
| 9/36         | . . . . Simulation of night or reduced visibility flight  | 17/02        | . Line indicators or other guides or masks  |
| 9/38         | . . . . . Simulation of runway outlining or approach lights   | 17/04        | . for increasing the rate of reading; Reading rate control  |
| 9/40         | . . . Simulation of airborne radar  | <b>19/00</b> | <b>Teaching not covered by other main groups of this subclass</b> (teaching or practice apparatus for gun-aiming or gun-laying F41G 3/26)   |
| 9/42         | . . . Aircraft, aircraft simulator or means connected thereto, travelling on the ground or water during simulated flight training | 19/0007      | . {Signalling}  |
| 9/44         | . . . providing simulation in a real aircraft flying through the atmosphere without restriction of its path                       | 19/0015      | . {Dancing}   |
| 9/46         | . . . the aircraft being a helicopter   | 19/0023      | . {Colour matching, recognition, analysis, mixture or the like}   |
| 9/48         | . . . a model being viewed and manoeuvred from a remote point   | 19/003       | . {Repetitive work cycles; Sequence of movements}   |
| 9/50         | . . . Automatically directing the course of the aircraft  | 19/0038      | . . {Sports}  |
| 9/52         | . . for teaching control of an outer space vehicle  | 19/0046      | . {History}   |
| 9/54         | . Simulation of radar (G09B 9/40 takes precedence)  | 19/0053      | . {Computers, e.g. programming}   |
| 9/56         | . Simulation of sonar   | 19/0061      | . {Geography}   |
| <b>11/00</b> | <b>Teaching hand-writing, shorthand, drawing, or painting</b>   | 19/0069      | . {Engineering, e.g. mechanical, electrical design (computer engineering G09B 19/0053)}   |
| 11/02        | . Finger, hand or arm supporting devices  | 19/0076      | . {Body hygiene; Dressing; Knot tying}  |
| 11/04        | . Guide sheets or plates; Tracing charts (templates for drawing purposes B43L 13/20)  | 19/0084      | . . {Dental hygiene}  |
| 11/06        | . Devices involving the use of transparent or translucent tracing material, e.g. copy books                                       | 19/0092      | . {Nutrition}   |
| 11/08        | . Teaching shorthand  | 19/02        | . Counting; Calculating (abacus G06C 1/00)  |
| 11/10        | . Teaching painting   | 19/025       | . . {with electrically operated apparatus or devices}   |
| <b>13/00</b> | <b>Teaching typing</b>  | 19/04        | . Speaking (with audible presentation of the material to be studied G09B 5/04)  |
| 13/02        | . Dummy practice keyboard apparatus (for teaching music G09B 15/08)   | 19/06        | . Foreign languages (with audible presentation of material to be studied G09B 5/04)   |
| 13/04        | . Devices used in association with a real typewriter, teleprinter, or the like  | 19/08        | . . Printed or written appliances, e.g. text books, bilingual letter assemblies, charts   |
| <b>15/00</b> | <b>Teaching music</b> (metronomes G04F 5/02)  | 19/10        | . Modelling   |
| 15/001       | . {Boards or like means for providing an indication of chords}  | 19/12        | . Clock-reading   |
| 15/002       | . . {Electrically operated systems}   | 19/14        | . Traffic procedures, e.g. traffic regulations  |
| 15/003       | . . . {with indication of the keys or strings to be played on instruments}  | 19/16        | . Control of vehicles or other craft (simulators G09B 9/02)   |
| 15/004       | . . {Non-electrically operated systems}   | 19/162       | . . {Control of ships, boats, or other waterborne vehicles}   |
| 15/005       | . . . {of the slide type}   | 19/165       | . . {Control of aircraft}   |
| 15/006       | . . . . {with indication of the keys or strings to be played on instruments}  | 19/167       | . . {Control of land vehicles}  |
| 15/007       | . . . {using disc-shaped boards}  | 19/18        | . Book-keeping or economics   |
| 15/008       | . . . . {with indication of the keys or strings to be played on instruments}  | 19/20        | . Needlework  |
| 15/009       | . {Transposing devices}   | 19/22        | . Games, e.g. card games  |
| 15/02        | . Boards or like means for providing an indication of notes   | 19/24        | . Use of tools  |
| 15/023       | . . {Electrically operated}   | 19/26        | . Dot-and dash telegraphic codes  |
| 15/026       | . . {Non-electrically operated}   |              |   |
| 15/04        | . . with sound emitters   |              |   |

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|--------------|--|--------------|--|
| <b>21/00</b> | <b>Teaching, or communicating with, the blind, deaf or mute</b> (audible presentation of material to be studied <a href="#">G09B 5/04</a> ; devices or methods for replacing direct visual or auditory perception by another kind of perception <a href="#">A61F 9/08</a> , <a href="#">A61F 11/04</a> ; audible indication of meter readings or of colour <a href="#">G01D 7/12</a> ; watches for blind persons <a href="#">G04B 25/02</a> ; methods or arrangements for reading or recognising printed or written characters <a href="#">G06K 9/00</a> ; speech analysis, speech recognition <a href="#">G10L</a> ; sound-recording or reproducing, <i>per se</i> <a href="#">G11B</a> ) | 23/26        | • for molecular structures; for crystallography  |
|              |  | 23/28        | • for medicine   |
|              |  | 23/281       | • • {for pregnancy, birth or obstetrics ( <a href="#">G09B 23/286</a> takes precedence)}   |
|              |  | 23/283       | • • {for dentistry or oral hygiene ( <a href="#">G09B 23/286</a> takes precedence)}  |
|              |  | 23/285       | • • {for injections, endoscopy, bronchoscopy, sigmoidoscopy, insertion of contraceptive devices or enemas}   |
|              |  | 23/286       | • • {for scanning or photography techniques, e.g. X-rays, ultrasonics}   |
| 21/001       | • {Teaching or communicating with blind persons ( <a href="#">G09B 21/02</a> - <a href="#">G09B 21/06</a> take precedence)}  | 23/288       | • • {for artificial respiration or heart massage}  |
| 21/002       | • • {Writing aids for blind persons (devices for Braille writing <a href="#">G09B 21/02</a> )}   | 23/30        | • • Anatomical models  |
| 21/003       | • • {using tactile presentation of the information, e.g. Braille displays}   | 23/303       | • • • {specially adapted to simulate circulation of bodily fluids}   |
| 21/004       | • • • {Details of particular tactile cells, e.g. electro-mechanical or mechanical layout}  | 23/306       | • • • {comprising real biological tissue}  |
| 21/005       | • • • {Details of specially-adapted software to access information, e.g. to browse through hyperlinked information}  | 23/32        | • • • with moving parts  |
|              |  | 23/34        | • • • with removable parts   |
| 21/006       | • • {using audible presentation of the information}  | 23/36        | • for zoology  |
| 21/007       | • • {using both tactile and audible presentation of the information}   | 23/38        | • for botany   |
| 21/008       | • • {using visual presentation of the information for the partially sighted}   | 23/40        | • for geology  |
| 21/009       | • {Teaching or communicating with deaf persons ( <a href="#">G09B 21/04</a> takes precedence; deaf and dumb persons <a href="#">G09B 21/00</a> )}  | <b>25/00</b> | <b>Models for purposes not provided for in <a href="#">G09B 23/00</a>, e.g. full-sized devices for demonstration purposes (model vehicles, tracks therefor, models in the nature of toys <a href="#">A63H</a>)</b>   |
| 21/02        | • Devices for Braille writing (typewriters for Braille <a href="#">B41J 3/32</a> )   | 25/02        | • of industrial processes; of machinery  |
| 21/025       | • • {wherein one tactile input is associated to a single finger}   | 25/025       | • • {hydraulic; pneumatic}   |
| 21/04        | • Devices for conversing with the deaf-blind   | 25/04        | • of buildings   |
| 21/06        | • Devices for teaching lip-reading   | 25/06        | • for surveying; for geography, e.g. relief models (globes <a href="#">G09B 27/00</a> ; maps <a href="#">G09B 29/00</a> )  |
| <b>23/00</b> | <b>Models for scientific, medical, or mathematical purposes, e.g. full-sized devices for demonstration purposes (in the nature of toys <a href="#">A63H</a>)</b>   | 25/08        | • of scenic effects, e.g. trees, rocks, water surfaces (for stage purposes <a href="#">A63J 1/00</a> )   |
| 23/02        | • for mathematics (for statics or dynamics <a href="#">G09B 23/08</a> )  | <b>27/00</b> | <b>Planetaria; Globes</b>  |
| 23/04        | • • for geometry, trigonometry, projection or perspective (for surveying <a href="#">G09B 25/06</a> )  | 27/02        | • Tellurions; Orreries   |
| 23/06        | • for physics  | 27/04        | • Star maps  |
| 23/08        | • • for statics or dynamics  | 27/06        | • Celestial globes   |
| 23/10        | • • • of solid bodies  | 27/08        | • Globes (celestial globes <a href="#">G09B 27/06</a> )  |
| 23/12        | • • • of liquids or gases  | <b>29/00</b> | <b>Maps; Plans; Charts; Diagrams, e.g. route diagram (star maps <a href="#">G09B 27/04</a>; devices for holding or supporting maps <a href="#">A47B 97/02</a>; for computing purposes <a href="#">G06G 1/14</a>, <a href="#">G09B 1/16</a>; display boards <a href="#">G09F</a>)</b> |
| 23/14        | • • for acoustics  | 29/001       | • {Planning boards}  |
| 23/16        | • • for science of heat  | 29/002       | • • {using magnetic elements}  |
| 23/18        | • • for electricity or magnetism   | 29/003       | • {Maps}   |
| 23/181       | • • • {for electric and magnetic fields; for voltages; for currents}   | 29/004       | • • {Map manufacture or repair; Tear or ink or water resistant maps; Long-life maps (printing processes for maps <a href="#">B41M 3/02</a> ; by permanently attaching map sections to sheets <a href="#">B42B 7/00</a> )}  |
| 23/182       | • • • {for components}   | 29/005       | • • {Map projections or methods associated specifically therewith}   |
| 23/183       | • • • {for circuits}   | 29/006       | • • {Representation of non-cartographic information on maps, e.g. population distribution, wind direction, radiation levels, air and sea routes}   |
| 23/185       | • • • • {for building block systems}   | 29/007       | • • • {using computer methods}   |
| 23/186       | • • • • {for digital electronics; for computers, e.g. microprocessors}   | 29/008       | • • • {Touring maps or guides to public transport networks}  |
| 23/187       | • • • {for measuring instruments}  | 29/02        | • sectional  |
| 23/188       | • • • {for motors; for generators; for power supplies; for power distribution}   | 29/04        | • • the sections being arranged in the form of a foldable sheet or sheets  |
| 23/20        | • • for atomic physics or nucleonics   | 29/06        | • of belt form, e.g. endless belt  |
| 23/22        | • • for optics   |              |  |
| 23/24        | • for chemistry  |              |  |

- 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