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.

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)
1/02 . . . and having a support carrying or adapted to carry
the elements
1/04 . . . the elements each bearing a single symbol or a
single combination of symbols
1/06 . . . and being attachable to, or mounted on, the
support
1/08 . . . by means of magnets
1/10 . . . by means of pins and holes
1/12 . . . by means of ring-like securing elements
   (sheets temporarily attached together by
   rings or coils B42F 3/00, G09B 5/00)
1/14 . . . the elements being slidably mounted on the
support
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
1/18 . . . the elements being rotatable
1/20 . . . and bearing the symbols on a surface parallel
to the axis of rotation
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
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)
1/32 . . 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
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

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)
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
3/04 . . of chart form (masks G09B 17/02)
3/045 . . {with invisibly printed correct answer; the
answer being rendered visible by special
optical means, e.g. filters; mirrors}
Electrically-operated educational appliances (working with questions and answers G09B 7/00; simulators G09B 9/00; advertising or displaying in general G09F)

**NOTE**

Group G09B 5/08 takes precedence over groups G09B 5/02 - G09B 5/06.

5/02 . . with visual presentation of the material to be studied, e.g. using film strip

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, videotdisks, 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 29/00/00)

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

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)]
17/007 . . . Line indicators or other guides or masks
17/008 . . . 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
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)

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)

21/001 Teaching or communicating with blind persons (G09B 21/02 - G09B 21/06 take precedence)

21/002 Writing aids for blind persons (devices for Braille writing G09B 21/02)

21/003 Using tactile presentation of the information, e.g. Braille displays

21/004 Details of particular tactile cells, e.g. electromechanical or mechanical layout

21/005 Details of specially-adapted software to access information, e.g. to browse through hyperlinked information

21/006 [Using audible presentation of the information]

21/007 [Using both tactile and audible presentation of the information]

21/008 [Using visual presentation of the information for the partially sighted]

21/009 Teaching or communicating with deaf persons (G09B 21/04 takes precedence; deaf and dumb persons G09B 21/00)

21/02 Devices for Braille writing (typewriters for Braille B41J 3/32)

21/025 Wherein one tactile input is associated to a single finger

21/04 Devices for conversing with the deaf-blind

21/06 Devices for teaching lip-reading

23/00 Models for scientific, medical, or mathematical purposes, e.g. full-sized devices for demonstration purposes (in the nature of toys A63H)

23/02 For mathematics (for statics or dynamics G09B 23/08)

23/04 For geometry, trigonometry, projection or perspective (for surveying G09B 25/06)

23/06 For physics

23/08 For statics or dynamics

23/10 Of solid bodies

23/12 Of liquids or gases

23/14 For acoustics

23/16 For science of heat

23/18 For electricity or magnetism

23/181 For electric and magnetic fields; for voltages; for currents

23/182 For components

23/183 For circuits

23/185 For building block systems

23/186 For digital electronics; for computers, e.g. microprocessors

23/187 For measuring instruments

23/188 For motors; for generators; for power supplies; for power distribution

23/20 For atomic physics or nuclear physics

23/22 For optics

23/24 For chemistry

23/26 For molecular structures; for crystallography

23/28 For medicine

23/281 For pregnancy, birth or obstetrics (G09B 23/286 takes precedence)

23/283 For dentistry or oral hygiene (G09B 23/286 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

23/288 For artificial respiration or heart massage

23/30 Anatomical models (G09B 23/281 - G09B 23/288 take precedence)

23/303 [Specially adapted to simulate circulation of bodily fluids]

23/306 [Comprising real biological tissue]

23/32 With moving parts

23/34 With removable parts

23/36 For zoology

23/38 For botany

23/40 For geology

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)

25/02 Of industrial processes; of machinery

25/025 Hydraulic; pneumatic

25/04 Of buildings

25/06 For surveying; for geography, e.g. relief models (globes G09B 27/00; maps G09B 29/00)

25/08 Of scenic effects, e.g. trees, rocks, water surfaces (for stage purposes A631 1/00)

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]
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