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:

endless bands

- 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	1/26	the elements being arranged in fan form
	appliances using elements forming, or bearing,	1/28	the elements being slidable
	symbols, signs, pictures, or the like which are	1/30	wherein the elements are adapted to be arranged
	arranged or adapted to be arranged in one or		in co-operation with the support to form symbols
	more particular ways (puzzle-games A63F 9/00;		(without special support G09B 1/40)
	advertising or displaying in general <u>G09F</u>)	1/32	 comprising elements to be used without a special
1/02	 and having a support carrying or adapted to carry 		support
	the elements	1/325	• • {the elements comprising interacting electronic
1/04	the elements each bearing a single symbol or a		components}
	single combination of symbols	1/34	the elements to be placed loosely in adjacent
1/06	and being attachable to, or mounted on, the		relationship
	support	1/36	the elements being connectible by corresponding
1/08	by means of magnets		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	1/40	to form symbols or signs by appropriate
	(sheets temporarily attached together by		arrangement
	rings or coils <u>B42F 3/00</u> , <u>G09B 5/00</u>)	3/00	Manually or machanically appreted to aline
1/14	the elements being slidably mounted on the	3/00	Manually or mechanically operated teaching appliances working with questions and answers
	support		(electrically-operated G09B 7/00; {e.g. G09B 7/063}
1/16	the elements each bearing a plurality of different		advertising or displaying in general <u>G09F</u>)
	symbols, signs, or combinations of symbols and	3/02	• of the type wherein the student is expected to
	signs, only one symbol, sign, or combination	3/02	construct an answer to the question which is
4.40	thereof, of each element to be used at a time		presented or wherein the machine gives an answer
1/18	• • • the elements being rotatable		to the question presented by a student
1/20	and bearing the symbols on a surface parallel	3/04	• • of chart form (masks G09B 17/02)
	to the axis of rotation	3/045	• • • { with invisibly printed correct answer; the
1/22	and bearing the symbols on a surface	5,015	answer being rendered visible by special
1/24	perpendicular to the axis of rotation		optical means, e.g. filters; mirrors}
1/24	• • • the elements being in flexible strip form, e.g.		oparat means, e.g. mers, mirrors

3/06	 of the multiple-choice answer type, i.e. where a given question is provided with a series of answers 	7/073	• • • all student stations being capable of presenting the same questions simultaneously
3/08	and a choice has to be madeof chart form (having one set of answers common	7/077	 different stations being capable of presenting different questions simultaneously
	to a plurality of questions G09B 3/12)	7/08	• characterised by modifying the teaching
3/085	• • { with invisibly printed correct answer; the answer being rendered visible by special		programme in response to a wrong answer, e.g. repeating the question, supplying further
	optical means, e.g. filters; mirrors}		information
3/10	 wherein one set of answers is common to a plurality of questions 	7/10	• • wherein a set of answers is common to a plurality of questions
3/12	of chart form	7/12	characterised by modifying the teaching
5/00	Electrically-operated educational appliances		programme in response to a wrong answer,
3/00	(working with questions and answers G09B 7/00;		e.g. repeating the question, supplying further information
	simulators <u>G09B 9/00</u> ; advertising or displaying in	0/00	
	general G09F)	9/00	Simulators for teaching or training purposes (for
	NOTE		the use of weapons <u>F41</u> ; computing aspects <u>G06</u> ; {protocols for games, networked simulations or
	Group G09B 5/08 takes precedence over groups		virtual reality <u>H04L 67/131</u> })
	G09B 5/02 - G09B 5/06.	9/003	• {for military purposes and tactics}
		9/003	• {for locating or ranging of objects}
5/02	 with visual presentation of the material to be 		
	studied, e.g. using film strip	9/02	• for teaching control of vehicles or other craft
5/04	 with audible presentation of the material to be 	9/04	• for teaching control of land vehicles
	studied (sound recording or reproducing G11B)	9/042	• • • providing simulation in a real vehicle (G09B 9/052, G09B 9/058 take precedence)
5/06	• with both visual and audible presentation of the	9/048	a model being viewed and manoeuvred from a
5 /0 / 0	material to be studied	2/048	remote point (G09B 9/052, G09B 9/058 take
5/062	{Combinations of audio and printed		precedence)
	presentations, e.g. magnetically striped cards,	9/05	the view from a vehicle being simulated
	talking books, magnetic tapes with printed texts thereon}		(<u>G09B 9/052</u> , <u>G09B 9/058</u> take precedence)
5/065	• • {Combinations of audio and video presentations,	9/052	characterised by provision for recording or
3/003	e.g. videotapes, videodiscs, television systems}		measuring trainee's performance (devices
5/067	Combinations of audio and projected visual		for psychotechnics, e.g. for vehicle drivers
3/00/	presentation, e.g. film, slides}		<u>A61B 5/16, A61B 5/18</u>)
5/08	 providing for individual presentation of information 	9/058	for teaching control of cycles or motorcycles
	to a plurality of student stations	9/06	for teaching control of ships, boats, or other
5/10	all student stations being capable of presenting		waterborne vehicles
	the same information simultaneously (G09B 5/14	9/063	• • • {by using visual displays}
	takes precedence)	9/066	{Sailing; Surfing}
5/12	 different stations being capable of presenting 	9/08	for teaching control of aircraft, e.g. Link trainer
	different information simultaneously (G09B 5/14 takes precedence)	9/085	 {Special purpose teaching, e.g. alighting on water, aerial photography}
5/125	{the stations being mobile}	9/10	with simulated flight- or engine-generated force
5/14	• • with provision for individual teacher-student		being applied to aircraft occupant (G09B 9/28
	communication		takes precedence)
5 /00		9/12	Motion systems for aircraft simulators
7/00	Electrically-operated teaching apparatus or devices working with questions and answers	9/14	controlled by fluid actuated piston or
	(mechanically operated G09B 3/00; computing		cylinder ram
	arrangements <u>G06F</u>)	9/16	Ambient or aircraft conditions simulated or
7/02	• of the type wherein the student is expected to		indicated by instrument or alarm
1102	construct an answer to the question which is	9/165	{Condition of cabin, cockpit or pilot's
	presented or wherein the machine gives an answer	0/10	accessories}
	to the question presented by a student	9/18	Condition of engine or fuel supply
7/04	characterised by modifying the teaching	9/20	Simulation or indication of aircraft attitude
	programme in response to a wrong answer,	9/203	• • • • {for taking-off or landing condition}
	e.g. repeating the question, supplying a further	9/206	• • • • {for in-flight condition}
	explanation	9/22	including aircraft sound simulation
7/06	• of the multiple-choice answer-type, i.e. where a	9/24	including display or recording of simulated
	given question is provided with a series of answers	0/245	flight path
= 40 ×=	and a choice has to be made from the answers	9/245	{Simulation of compasses, gyroscopes}
7/063	• { with hand-placed probe or plug }	9/26	Simulation of radio-navigation
7/066	• { with answer indicating cards, blocks }	9/28	Simulation of stick forces or the like
7/07	• providing for individual presentation of questions		
	to a plurality of student stations		

9/30	Simulation of view from aircraft	13/04	. Devices used in association with a real typewriter,
	NOTE		teleprinter, or the like
	When classifying in groups G09B 9/301, G09B 9/302, G09B 9/304, G09B 9/305, classification is also made in other	15/00 15/001	 Teaching music (metronomes G04F 5/02) Boards or like means for providing an indication of chords}
	appropriate groups G09B 9/307,	15/002	• • {Electrically operated systems}
	G09B 9/308, G09B 9/32, G09B 9/323, G09B 9/326, G09B 9/34, G09B 9/36,	15/003	• • • { with indication of the keys or strings to be played on instruments }
	G09B 9/38 if of interest	15/004	• • {Non-electrically operated systems}
9/301	• • • {by computer-processed or -generated	15/005	• • {of the slide type}
9/302	image } {the image being transformed by computer	15/006	• • • { with indication of the keys or strings to be played on instruments }
	processing, e.g. updating the image to	15/007 15/008	 {using disc-shaped boards} {with indication of the keys or strings to be
9/304	correspond to the changing point of view}	13/000	played on instruments}
9/304	 {by using a film} {by viewing with a camera a small-scale	15/009	• {Transposing devices}
	model of the terrain}	15/02	 Boards or like means for providing an indication of notes
9/307	(G09B 9/36 takes precedence; optical parts	15/023	• • {Electrically operated}
	of head-up displays G02B 27/01)}	15/026	• • {Non-electrically operated}
9/308	• • • {by LCD, gas plasma display or	15/04	• • with sound emitters
	electroluminescent display}	15/06	 Devices for exercising or strengthening fingers
9/32	by projected image ({G09B 9/307,} G09B 9/36 take precedence)		or arms; Devices for holding fingers or arms in a proper position for playing (for teaching typing
9/323	• • • • • {the projection screen being made of LCD panels (G09B 9/307 takes precedence)}		<u>G09B 13/00</u> ; exercising apparatus for developing or strengthening the muscles for physical training
9/326	{the image being transformed by optical means}	15/08	A63B 21/00, A63B 23/00) Practice keyboards (for teaching typing
9/34	• • • by cathode-ray screen display ({G09B 9/307,} G09B 9/36 take precedence)	4=100	G09B 13/02)
9/36	• • • Simulation of night or reduced visibility	17/00	Teaching reading (teaching lip-reading G09B 21/00)
7/30	flight	17/003 17/006	 {electrically operated apparatus or devices} {with audible presentation of the material to
9/38	Simulation of runway outlining or approach lights	17/000	be studied (audio and audio-visual teaching apparatus in general G09B 5/04, G09B 5/06)}
9/40	Simulation of airborne radar	17/02	• Line indicators or other guides or masks
9/42	Aircraft, aircraft simulator or means connected thereto, travelling on the ground or water during simulated flight training	17/04	 for increasing the rate of reading; Reading rate control
9/44	providing simulation in a real aircraft flying through the atmosphere without restriction of	19/00	Teaching not covered by other main groups of this subclass (teaching or practice apparatus for gunaiming or gun-laying F41G 3/26)
9/46	its path the aircraft being a helicopter	19/0007	• {Signalling}
9/48	a model being viewed and manoeuvred from a	19/0015	· {Dancing}
	remote point	19/0023	• {Colour matching, recognition, analysis, mixture or
9/50	• • • Automatically directing the course of the	19/003	the like} • {Repetitive work cycles; Sequence of movements}
9/52	aircraftfor teaching control of an outer space vehicle	19/003	{Repetitive work cycles, Sequence of movements} {Sports}
9/52 9/54	Simulation of radar (G09B 9/40 takes precedence)	19/0036	· {Bistory}
9/56	Simulation of radar (GOZB 5/45) taxes precedence) Simulation of sonar	19/0053	• {Computers, e.g. programming}
		19/0061	• {Geography}
11/00	Teaching hand-writing, shorthand, drawing, or painting	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 (templets for	19/0084	• {Dental hygiene}
11/04	drawing purposes <u>B43L 13/20</u>)	19/0092	• {Nutrition}
11/06	 Devices involving the use of transparent or translucent tracing material, e.g. copy books 	19/02	• Counting; Calculating (abacus G06C 1/00)
11/08	Teaching shorthand	19/025	• • {with electrically operated apparatus or devices}
11/10	Teaching painting	19/04	• Speaking (with audible presentation of the material
		10/05	to be studied G09B 5/04)
13/00 13/02	Teaching typing Dummy practice keyboard apparatus (for teaching	19/06	 Foreign languages (with audible presentation of material to be studied <u>G09B 5/04</u>)
13/02	music G09B 15/08)	19/08	• Printed or written appliances, e.g. text books,
			bilingual letter assemblies, charts

19/10	• Modelling	23/181	• • • {for electric and magnetic fields; for voltages;
19/12	 Clock-reading 		for currents}
19/14	 Traffic procedures, e.g. traffic regulations 	23/182	• • • {for components}
19/16	 Control of vehicles or other craft (simulators 	23/183	• • { for circuits }
	<u>G09B 9/02</u>)	23/185	• • • { for building block systems }
19/162	 {Control of ships, boats, or other waterborne vehicles} 	23/186	• • • { for digital electronics; for computers, e.g. microprocessors }
19/165	• • {Control of aircraft}	23/187	• • • {for measuring instruments}
19/167	• • {Control of land vehicles}	23/188	• • • {for motors; for generators; for power supplies;
19/18	Book-keeping or economics		for power distribution}
19/20	Needlework	23/20	for atomic physics or neucleonics
19/22	Games, e.g. card games	23/22	• • for optics
19/24	• Use of tools	23/24	• for chemistry
19/26	 Dot-and dash telegraphic codes 	23/26	for molecular structures; for crystallography
		23/28	• for medicine
21/00	Teaching, or communicating with, the blind,	23/281	• • {for pregnancy, birth or obstetrics (G09B 23/286
	deaf or mute (audible presentation of material		takes precedence)}
	to be studied <u>G09B 5/04</u> ; devices or methods for	23/283	• • {for dentistry or oral hygiene (G09B 23/286 takes
	replacing direct visual or auditory perception by	20,200	precedence)}
	another kind of perception A61F 9/08, A61F 11/04;	23/285	• • {for injections, endoscopy, bronchoscopy,
	audible indication of meter readings or of colour	20,200	sigmoidscopy, insertion of contraceptive devices
	G01D 7/12; watches for blind persons G04B 25/02;		or enemas}
	speech analysis, speech recognition G10L; sound-	23/286	• • {for scanning or photography techniques, e.g. X-
21/001	recording or reproducing, <u>per se G11B</u>)		rays, ultrasonics}
21/001	• {Teaching or communicating with blind persons	23/288	• • {for artificial respiration or heart massage}
21/002	(<u>G09B 21/02</u> - <u>G09B 21/06</u> take precedence)}	23/30	Anatomical models
21/002	• • {Writing aids for blind persons (devices for		{(<u>G09B 23/281</u> - <u>G09B 23/288</u> take precedence)}
21/003	Braille writing G09B 21/02)} • {using tactile presentation of the information, e.g.	23/303	• • {specially adapted to simulate circulation of bodily fluids}
	Braille displays}	23/306	• • • {comprising real biological tissue}
21/004	• • • {Details of particular tactile cells, e.g. electro-	23/32	with moving parts
	mechanical or mechanical layout}	23/34	with moving parts
21/005	• • • {Details of specially-adapted software to		
	access information, e.g. to browse through	23/36	• for zoology
	hyperlinked information}	23/38	• for botany
21/006	• • {using audible presentation of the information}	23/40	• for geology
21/007	 {using both tactile and audible presentation of the information} 	25/00	Models for purposes not provided for in G09B 23/00, e.g. full-sized devices for
21/008	• • {using visual presentation of the information for		demonstration purposes (model vehicles, tracks
	the partially sighted}		therefor, models in the nature of toys <u>A63H</u>)
21/009	• {Teaching or communicating with deaf persons	25/02	 of industrial processes; of machinery
	(G09B 21/04 takes precedence; deaf and dumb	25/025	• • {hydraulic; pneumatic}
	persons <u>G09B 21/00</u>)}	25/04	• of buildings
21/02	 Devices for Braille writing (typewriters for Braille 	25/06	 for surveying; for geography, e.g. relief models
	<u>B41J 3/32</u>)	25,00	(globes G09B 27/00; maps G09B 29/00)
21/025	• • {wherein one tactile input is associated to a single	25/08	• of scenic effects, e.g. trees, rocks, water surfaces
	finger}		(for stage purposes A63J 1/00)
21/04	• Devices for conversing with the deaf-blind		
21/06	 Devices for teaching lip-reading 	27/00	Planetaria; Globes
23/00	Models for scientific, medical, or mathematical	27/02	• Tellurions; Orreries
	purposes, e.g. full-sized devices for demonstration	27/04	• Star maps
	purposes (in the nature of toys A63H)	27/06	. Celestial globes
23/02	for mathematics (for statics or dynamics	27/08	• Globes (celestial globes G09B 27/06)
	<u>G09B 23/08</u>)	29/00	Maps; Plans; Charts; Diagrams, e.g. route
23/04	• for geometry, trigonometry, projection or	27/00	diagram (star maps <u>G09B 27/04</u> ; devices for holding
	perspective (for surveying G09B 25/06)		or supporting maps <u>A47B 97/02</u> ; for computing
23/06	• for physics		purposes G06G 1/14, G09B 1/16; display boards
23/08	• • for statics or dynamics		G09F)
23/10	of solid bodies	29/001	• {Planning boards}
23/12	• • • of liquids or gases	29/002	{ raining boards}• {using magnetic elements}
23/14	• for acoustics	29/002	• {Maps}
23/16	for science of heat	27/003	• (****po)
23/18	for electricity or magnetism		

G09B

29/004	• • {Map manufacture or repair; Tear or ink or water resistant maps; Long-life maps (printing processes for maps <u>B41M 3/02</u> ; by permanently attaching map sections to sheets <u>B42B 7/00</u>)}
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 <u>per se</u> 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