EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 28

DATE: SEPTEMBER 1, 2014

PROJECT RP0063

The following classification changes will be effected by this Notice of Changes:

Action	Subclass	Group(s)
Abolished pending reclassification:	A63F	13/005, 13/02, 13/04, 13/06, 13/08, 13/10, 13/12
Established:	A63F	13/20 - 13/98
Scheme Warning Notices to be added:	A63F	13/005 13/02 13/04 13/06 13/08 13/10 13/12 13/20

The following subclasses/groups are also impacted by this Notice of Changes: A63B, G05G, G06F, G06T, G10H, and H04L

This Notice of Changes includes the following:

1.   CLASSIFICATION SCHEME CHANGES
        ☒ A. New, Deleted, and Modified group(s)

        ☒ B. New, Deleted, and Modified Warning Notice(s)

        ☐ C. New, Deleted, and Modified Note(s)

2.   ☒ DEFINITIONS

3.   ☒ REVISION CONCORDANCE LIST (RCL)

4.   ☒ CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)

5.   ☒ CROSS-REFERENCE LIST (CRL)

CPC NOTICE OF CHANGES 28

DATE: SEPTEMBER 1, 2014

PROJECT RP0063

1.   CLASSIFICATION SCHEME CHANGES

     A.   New, Deleted, and Modified group(s)

SUBCLASS A63F - CARD, BOARD OR ROULETTE GAMES; INDOOR GAMES USING SMALL MOVING PLAYING BODIES; VIDEO GAMES; GAMES NOT OTHERWISE PROVIDED FOR

Type*	Symbol	Indent Level	Title
M	A63F		CARD, BOARD, OR ROULETTE GAMES ; INDOOR GAMES USING SMALL MOVING PLAYING BODIES; VIDEO GAMES; GAMES NOT OTHERWISE PROVIDED FOR
C	13/00		Video games, i.e. games using an electronically generated display having two or more dimensions{(Gaming systems which provide a financial reward G07F17/32}}
F	13/005		*(transfer to A63F 13/80 – A63F 13/847)*
F	13/02		*(transferred to A63F 13/20 – A63F 13/245, A63F 13/98)*
F	13/04		*(transferred to A63F 13/219, A63F 13/837)*
F	13/06		*(transferred to A63F 13/20 - A63F 13/245)*
F	13/08		*(transferred to A63F 13/90 – A63F 13/98)*
F	13/10		*(transferred to A63F 13/40-A63F 13/88)*
F	13/12		*(transferred to A63F 13/30-A63F 13/88)*
N	13/20	1	Input arrangements for video game devices
N	13/21	2	characterised by their sensors, purposes or types
N	13/211	3	using inertial sensors, e.g. accelerometers or gyroscopes
N	13/212	3	using sensors worn by the player, e.g. for measuring heart beat or leg activity
N	13/213	3	comprising photodetecting means, e.g. cameras, photodiodes or infrared cells (A63F 13/219, A63F 13/655 take precedence)
N	13/214	3	for locating contacts on a surface, e.g. floor mats or touch pads
N	13/2145	4	the surface being also a display device, e.g. touch screens
N	13/215	3	comprising means for detecting acoustic signals, e.g. using a microphone
N	13/216	3	using geographical information, e.g. location of the game device or player using GPS
N	13/217	3	using environment-related information, i.e. information generated otherwise than by the player, e.g. ambient temperature or humidity
N	13/218	3	using pressure sensors, e.g. generating a signal proportional to the pressure applied by the player
N	13/219	3	for aiming at specific areas on the display, e.g. light-guns

N	13/22		2	Setup operations, e.g. calibration, key configuration or button assignment
N	13/23		2	for interfacing with the game device, e.g. specific interfaces between game controller and console
N	13/235		3	using a wireless connection, e.g. infrared or piconet
N	13/24		2	Constructional details thereof, e.g. game controllers with detachable joystick handles
N	13/245		3	specially adapted to a particular type of game, e.g. steering wheels
N	13/25		1	Output arrangements for video game devices
N	13/26		2	having at least one additional display device, e.g. on the game controller or outside a game booth
N	13/27		2	characterised by a large display in a public venue, e.g. in a movie theatre, stadium or game arena
N	13/28		2	responding to control signals received from the game device for affecting ambient conditions, e.g. for vibrating players' seats, activating scent dispensers or affecting temperature or light (controlling the output signals based on the game progress A63F 13/50)
N	13/285		3	Generating tactile feedback signals via the game input device, e.g. force feedback
N	13/30		1	Interconnection arrangements between game servers and game devices; Interconnection arrangements between game devices; Interconnection arrangements between game servers
N	13/31		2	Communication aspects specific to video games, e.g. between several handheld game devices at close range
N	13/32		2	using local area network [LAN] connections
N	13/323		3	between game devices with different hardware characteristics, e.g. hand-held game devices connectable to game consoles or arcade machines
N	13/327		3	using wireless networks, e.g. Wi-Fi or piconet
N	13/33		2	using wide area network [WAN] connections
N	13/332		3	using wireless networks, e.g. cellular phone networks
N	13/335		3	using Internet
N	13/338		3	using television networks
N	13/34		2	using peer-to-peer connections
N	13/35		2	Details of game servers
N	13/352		3	involving special game server arrangements, e.g. regional servers connected to a national server or a plurality of servers managing partitions of the game world
N	13/355		3	Performing operations on behalf of clients with restricted processing capabilities, e.g. servers transform changing game scene into an MPEG-stream for transmitting to a mobile phone or a thin client

N	13/358		3	Adapting the game course according to the network or server load, e.g. for reducing latency due to different connection speeds between clients
N	13/40		1	Processing input control signals of video game devices, e.g. signals generated by the player or derived from the environment
N	13/42		2	by mapping the input signals into game commands, e.g. mapping the displacement of a stylus on a touch screen to the steering angle of a virtual vehicle
N	13/422		3	automatically for the purpose of assisting the player, e.g. automatic braking in a driving game
N	13/424		3	involving acoustic input signals, e.g. by using the results of pitch or rhythm extraction or voice recognition
N	13/426		3	involving on-screen location information, e.g. screen coordinates of an area at which the player is aiming with a light gun
N	13/428		3	involving motion or position input signals, e.g. signals representing the rotation of an input controller or a player's arm motions sensed by accelerometers or gyroscopes
N	13/44		2	involving timing of operations, e.g. performing an action within a time slot
N	13/45		1	Controlling the progress of the video game
N	13/46		2	Computing the game score
N	13/47		2	involving branching, e.g. choosing one of several possible scenarios at a given point in time
N	13/48		2	Starting a game, e.g. activating a game device or waiting for other players to join a multiplayer session
N	13/49		2	Saving the game status; Pausing or ending the game
N	13/493		3	Resuming a game, e.g. after pausing, malfunction or power failure
N	13/497		3	Partially or entirely replaying previous game actions
N	13/50		1	Controlling the output signals based on the game progress
N	13/52		2	involving aspects of the displayed game scene
N	13/525		3	Changing parameters of virtual cameras
N	13/5252		4	using two or more virtual cameras concurrently or sequentially, e.g. automatically switching between fixed virtual cameras when a character changes room or displaying a rear-mirror view in a car-driving game
N	13/5255		4	according to dedicated instructions from a player, e.g. using a secondary joystick to rotate the camera around a player's character
N	13/5258		4	by dynamically adapting the position of the virtual camera to keep a game object or game character in its viewing frustum, e.g. for tracking a character or a ball

N	13/53	2	involving additional visual information provided to the game scene, e.g. by overlay to simulate a head-up display [HUD] or displaying a laser sight in a shooting game
N	13/533	3	for prompting the player, e.g. by displaying a game menu
N	13/537	3	using indicators, e.g. showing the condition of a game character on screen
N	13/5372	4	for tagging characters, objects or locations in the game scene, e.g. displaying a circle under the character controlled by the player
N	13/5375	4	for graphically or textually suggesting an action, e.g. by displaying an arrow indicating a turn in a driving game
N	13/5378	4	for displaying an additional top view, e.g. radar screens or maps (using two or more virtual cameras concurrently A63F 13/5252)
N	13/54	2	involving acoustic signals, e.g. for simulating revolutions per minute [RPM] dependent engine sounds in a driving game or reverberation against a virtual wall
N	13/55	1	Controlling game characters or game objects based on the game progress
N	13/56	2	Computing the motion of game characters with respect to other game characters, game objects or elements of the game scene, e.g. for simulating the behaviour of a group of virtual soldiers or for path finding
N	13/57	2	Simulating properties, behaviour or motion of objects in the game world, e.g. computing tyre load in a car race game (A63F 13/56 takes precedence)
N	13/573	3	using trajectories of game objects, e.g. of a golf ball according to the point of impact
N	13/577	3	using determination of contact between game characters or objects, e.g. to avoid collision between virtual racing cars
N	13/58	2	by computing conditions of game characters, e.g. stamina, strength, motivation or energy level
N	13/60	1	Generating or modifying game content before or while executing the game program, e.g. authoring tools specially adapted for game development or game-integrated level editor
N	13/61	2	using advertising information
N	13/63	2	by the player, e.g. authoring using a level editor
N	13/65	2	automatically by game devices or servers from real world data, e.g. measurement in live racing competition
N	13/655	3	by importing photos, e.g. of the player
N	13/67	2	adaptively or by learning from player actions, e.g. skill level adjustment or by storing successful combat sequences for re-use

N	13/69	2	by enabling or updating specific game elements, e.g. unlocking hidden features, items, levels or versions
N	13/70	1	Game security or game management aspects
N	13/71	2	using secure communication between game devices and game servers, e.g. by encrypting game data or authenticating players
N	13/73	2	Authorising game programs or game devices, e.g. checking authenticity
N	13/75	2	Enforcing rules, e.g. detecting foul play or generating lists of cheating players
N	13/77	2	involving data related to game devices or game servers, e.g. configuration data, software version or amount of memory
N	13/79	2	involving player-related data, e.g. identities, accounts, preferences or play histories
N	13/792	3	for payment purposes, e.g. monthly subscriptions
N	13/795	3	for finding other players; for building a team; for providing a buddy list
N	13/798	3	for assessing skills or for ranking players, e.g. for generating a hall of fame (computing the game score A63F 13/46)
N	13/80	1	Special adaptations for executing a specific game genre or game mode
N	13/803	2	Driving vehicles or craft, e.g. cars, airplanes, ships, robots or tanks
N	13/807	2	Gliding or sliding on surfaces, e.g. using skis, skates or boards
N	13/812	2	Ball games, e.g. soccer or baseball
N	13/814	2	Musical performances, e.g. by evaluating the player's ability to follow a notation
N	13/816	2	Athletics, e.g. track-and-field sports
N	13/818	2	Fishing
N	13/822	2	Strategy games; Role-playing games (A63F 13/825, A63F 13/828 take precedence)
N	13/825	2	Fostering virtual characters
N	13/828	2	Managing virtual sport teams
N	13/833	2	Hand-to-hand fighting, e.g. martial arts competition (A63F 13/837 takes precedence)
N	13/837	2	Shooting of targets
N	13/843	2	involving concurrently two or more players on the same game device, e.g. requiring the use of a plurality of controllers or of a specific view of game data for each player
N	13/847	2	Cooperative playing, e.g. requiring coordinated actions from several players to achieve a common goal
N	13/85	1	Providing additional services to players
N	13/86	2	Watching games played by other players
N	13/87	2	Communicating with other players during game play, e.g. by e-mail or chat

N	13/88		2	Mini-games executed independently while main games are being loaded
N	13/90		1	Constructional details or arrangements of video game devices not provided for in groups A63F 13/20 or A63F 13/25, e.g. housing, wiring, connections or cabinets
N	13/92		2	Video game devices specially adapted to be hand-held while playing
N	13/95		2	Storage media specially adapted for storing game information, e.g. video game cartridges
N	13/98		2	Accessories, i.e. detachable arrangements optional for the use of the video game device, e.g. grip supports of game controllers

*N = new entries (reclassification involved); C = entries with modified file scope (reclassification involved); M = entries with no change to the file scope (no reclassification); D = deleted entries; F = frozen/entries (to be deleted pending reclassification completion); U = entries that are unchanged

B.   New, Deleted, and Modified Warning notice(s)

SUBCLASS A63F - CARD, BOARD OR ROULETTE GAMES; INDOOR GAMES USING SMALL MOVING PLAYING BODIES; VIDEO GAMES; GAMES NOT OTHERWISE PROVIDED FOR

Type*	Location	Old Warning notice	New/Modified Warning notice
N	A63F 13/005		Group A63F13/005 is no longer used for the classification of documents as of September 1, 2014. The backfile of this group is being reclassified into groups A63F13/80-A63F13/847. Until reclassification is complete, groups A63F13/005 and A63F13/80 - A63F13/847 should be considered in order to perform a complete search.
N	A63F 13/02		Group A63F13/02 is no longer used for the classification of documents as of September 1, 2014. The backfile of this group is being reclassified into groups A63F13/20 - A63F13/245 and A63F13/98. Until reclassification is complete, groups A63F13/02 and A63F13/20 - A63F13/245 and A63F13/98 should be considered in order to perform a complete search.
N	A63F 13/04		Group A63F13/04 is no longer used for the classification of documents as of September 1, 2014. The backfile of this group is being reclassified into groups A63F13/20 - A63F13/245, and A63F13/837. Until reclassification is complete, groups A63F13/04 and A63F13/20 - A63F13/245, and A63F13/837 should be considered in order to perform a complete search.
N	A63F 13/06		Group A63F13/06 is no longer used for the classification of documents as of September 1, 2014. The backfile of this group is being reclassified into groups A63F13/20 - A63F13/245. Until reclassification is complete, groups A63F13/06 and A63F13/20 - A63F13/245 should be considered in order to perform a complete search.
N	A63F 13/08		Group A63F13/08 is no longer used for the classification of documents as of September 1, 2014. The backfile of this group is being reclassified into groups A63F13/90 – A63F13/98. Until reclassification is complete, groups

			A63F13/08 and A63F13/90 – A63F13/98 should be considered in order to perform a complete search.
N	A63F 13/10		Group A63F13/10 is no longer used for the classification of documents as of September 1, 2014. The backfile of this group is being reclassified into groups A63F13/40 - A63F13/88. Until reclassification is complete, groups A63F13/10 and A63F13/40 - A63F13/88 should be considered in order to perform a complete search.
N	A63F 13/12		Group A63F13/12 is no longer used for the classification of documents as of September 1, 2014. The backfile of this group is being reclassified into groups A63F13/30 - A63F13/88. Until reclassification is complete, groups A63F13/12 and A63F13/30 - A63F13/88 should be considered in order to perform a complete search.
N	A63F 13/20		Group(s) A63F13/20-A63F13/98 are incomplete pending reclassification of documents from group(s) A63F13/00-A63F13/12. Until reclassification is complete, groups A63F13/20-A63F13/98 and A63F13/00-A63F13/12 should be considered in order to perform a complete search.

*N = new warning, M = modified warning, D = deleted warning

2.   DEFINITIONS (new, modified, deleted)

A63F13/00

Video games, i.e. games using an electronically generated display having two or more dimensions {(Gaming systems which provide a financial reward G07F17/32)}

Definition statement

This group covers:

- Structural or hardware-related aspects of video games: accessories, optional for the execution of the game; constructional details of game devices; input devices specially adapted for playing video games; output devices specially adapted for playing video games.

- Details specific to network games: characteristics of the network topology when used in network games; details of servers specially adapted for providing network games.

- Software aspects of video games, played locally or in a network: the mapping of input signals into game commands; the animation of the virtual camera in a video game; indicators added to the game scene; time aspects of video games; simulation of game objects or characters; the generation or alteration of the game content; game management; the provision of additional services to game players.

The following diagram provides some guidance on the structure of the higher-level subgroups:
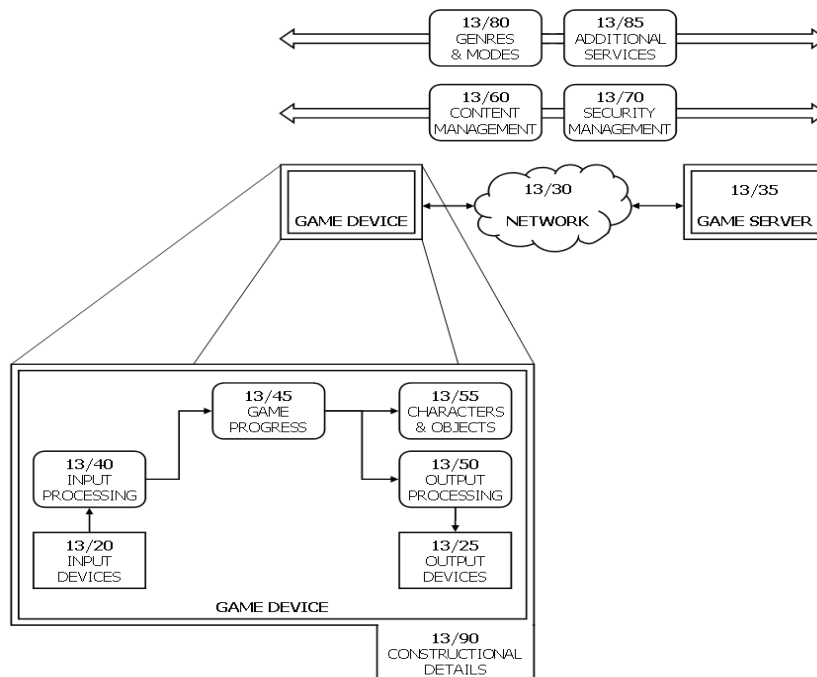
Relationship between large subject matter areas

- This group is an "application place" with respect to more functional places such as G06F, G06T or H04L.
- This group covers systems using computer and telecommunication technologies, which have been specially adapted for providing video games, as seen above.
- The scope of this group differs from that of G07F 17/32 which covers games providing financial rewards, played by electronic means, e.g. online poker, waging or betting.
- The scope of this group also differs from that of main groups A63F 1/00 to A63F 11/00 which cover traditional games such as puzzles and card, board and dice games, and from that of A63F 9/24 which covers traditional games played by electronic means.
- The scope of this group differs from that of A63H, which covers toys.
- This group covers features of input devices specially adapted to video games. The corresponding function place for generic computer input devices is G06F 3/01-3/03.
- This group is in particular an application place for computer graphics. Animation and 3D graphics in general are covered by G06T 13/00-G06T19/00.
- This group is an application place for telecommunication, in particular with respect to network games. Data network services are covered by H04L 29/06.

References relevant to classification in this group

This group does not cover:

Video games having financial rewards	G07F17/32

Informative references

Attention is drawn to the following places, which may be of interest for search:

Roulette games	A63F 5/00
Indoor games using falling playing bodies or playing bodies running on an inclined surface	A63F 7/02
Coin-freed apparatus and like for games	G07F 17/32

Glossary of terms

In this group, the following terms (or expressions) are used with the meaning indicated:

Arcade machine	coin-operated entertainment device placed in a public venue.
Combo	a sequence of commands which has by design a greater effect when executed within a fixed time period than the mere succession of these commands.
Fiducial (marker)	real object used in the field of view of an imaging system which appears in the image produced, for use as a point of reference or a measure; the object can exist naturally in the scene (features of a face) or be added for the purpose of tracking (light-emitting diode, retro-reflective patch).
Force feedback	outputting forces, vibrations, and/or motions to the player to provide haptic feedback.
Game character	a game entity simulating a sentient being; the simulated being can be real, e.g. a person or an animal, or fictitious, e.g. a dragon or a speaking mirror.
Game client	game device connected to a game server through a network

Game command	game-specific representation of a control signal, e.g. "pause" or "shoot" command
Game console	consumer electronics system specially adapted to execute video games, offering reduced functions with respect to generic personal computers; it differs from arcade machines, which are also specially adapted for video games, but for commercial purposes
Game content, game asset	data required for the execution of the game program, e.g. bitmap images, three-dimensional models; the content is usually created by the game makers before the game release, but can also be created afterwards by the player, e.g. using level editors
Game device	a data-processing apparatus enabling performing of the video game; the apparatus is connected to a display and input means, e.g. a controller or a mouse; it is either handheld or stationary; the device can be dedicated to the execution of game programs, e.g. a game console, an arcade game machine, a portable game machine, or a generic computer, e.g. a personal computer
Game mode	distinct method of operation within the game program, usually relating to distinct game mechanics or goals, e.g. single player mode, multiplayer mode, capture the flag mode
Game model	abstract description of the game's inner workings and the possible interactions with the player, conditioning her tactical possibilities. The game model includes game parameters, such as the score, and the procedures and constraints governing their evolution. The game specification usually includes a model of some physical systems, be they fictitious or real. However, this model is not part of the game model if its sole purpose is to provide a realistic simulation.
Game object	a game entity simulating a thing (excluding sentient beings); the simulated thing can be real, e.g. a tennis ball, or fictitious, e.g. a laser gun
Game parameter	a variable of the game model. Some variables of the game specification are not game parameters. For instance, the position of the virtual camera in a hand-to-hand fighting game is a game parameter if the position is chosen to be closer to the fighter with the lowest life meter. On the contrary, calculating a natural position of a fighter's elbow using the positions and orientations of his hands and shoulders, does not belong to the game model.
Game program	a computer readable program comprising instructions and data adapted to perform a video game when executed on a data-processing apparatus. To produce the video game program, the game designer communicates the game model in the game specifications to the developer team, who creates or adapts a game engine to implement the game model and optimize its implementation.
Game progress	any change in one of the game parameters (see game model)
Game scene	data describing the main virtual space used in the game's representation, e.g. describing a maze, a race circuit or the room where the player character is located, and its content. By extension, the image resulting from processing this data. The structure used for this data is usually a scene graph.
Game server	a data-processing apparatus or system connected to a network, not adapted for accepting directly player-generated signals, facilitating at least part of the execution of a video game (e.g. receiving inputs from the game clients, executing the game for the game clients and providing processed game information to the game clients for presentation to the player)
Player generated signal	an action made by the player to convey a decision, e.g. move circularly the arm, push a button with a finger
Virtual camera	virtual viewpoint in world space with position and view direction to render an image of the game

Synonyms and Keywords

In patent documents the following abbreviations are often used:

3D	three-dimensional
AI	Artificial Intelligence
AR	Augmented Reality
D-pad	Directional pad
FOV	Field Of View
FPS	First Person Shooter (game)
HUD	Head-Up Display
LOD	Level Of Detail
MMORPG	Massively multiplayer online role-playing game
MOG	Multiplayer online game
MUD	Multi-User Dungeon
PC/NPC	Player Character/Non-Player Character
POV	Point Of View
PvP	Player versus Player (mode)
RPG	Role Playing Game
RTS	Real Time Strategy (game)
VR	Virtual Reality

In the technical literature, the following terms (or expressions) are often used:

Directional pad	set of neighbouring switches mounted on a game controller, usually thumb-operated, for indicating one direction, e.g. four-way digital cross
First person / third person mode	in a first person mode, the game is viewed from the point of view of the player character/object; in a third person mode, the game is viewed from above, below or aside of the player character/object
Game engine	core portion of the game program which masks the hardware platform and can be re-used when developing other game programs. The game engine components typically include a rendering engine, a physics engine, and frameworks for e.g. sound, scripting, animation, artificial intelligence, networking, streaming, memory management, threading, localization support, and scene graph management.
Game mechanics	the procedures and constraints expressed in the game model

Gamepad	handheld game controller, where the fingers (especially thumbs) are used to provide input; gamepads generally feature a set of action buttons handled with the right thumb and a direction controller handled with the left; the direction controller has traditionally been a four-way digital cross (see D-pad), but most modern controllers additionally (or as a substitute) feature an analog stick
Gameplay	the interaction process taking place between the player and the game
Joypad	a game controller or a directional pad
Nonlinear game	a game providing challenges that can be completed in a number of different sequences.
Physics engine	component of the game engine which provides an approximate simulation of physical systems in real-time
Pseudo-3D	simulation of a 3D environment using 2D techniques, such as the axonometric projection, parallax scrolling or skyboxing.
Rendering engine	component of the game engine which generates an image from a scene model
Open World, Sandbox	a game mode providing no explicit goal

A63F 13/20

Input arrangements for video game devices

Definition statement

This group covers:

Only input devices, which have been specially adapted for playing games.

Relationship between large subject matter areas

Generic input devices such as a mouse which could also be used in a game are covered in the function place G06F3/00.

Informative references

Attention is drawn to the following places, which may be of interest for search:

input arrangements or combined input and output arrangements for interaction between user and computer	G06F 3/01
pointing devices displaced or positioned by the user	G06F 3/033

A63F 13/21

characterised by their sensors, purposes or types

Definition statement

This group covers:

The use of commonplace sensors for unforeseen purposes, e.g. a pedal controlling the stand up/crouch position of a player-character, and devices using unforeseen sensors, e.g. electronic noses.

The subgroups under this group cover the physical parameters to be sensed and the means of detection.

A63F 13/211

using inertial sensors, e.g. accelerometers or gyroscopes

Definition statement

This group covers:

Input devices sensing acceleration, angular acceleration, velocity, angular velocity, position or orientation. A typical setup includes 3 mono-dimensional accelerometers, arranged perpendicularly, where the measured acceleration values are integrated to compute velocity and further, the device's position. The inertial sensor can be included in the game controller. The sensor can simply detect the motion in a given direction, without providing a measure of its intensity, e.g. to detect a push.

Informative references

Attention is drawn to the following places, which may be of interest for search:

acceleration sensors per se	G01P 7/00, G01P 15/00
processing of the acceleration values to recognize a pattern, a gesture or a trajectory	A63F 13/428

A63F 13/212

using sensors worn by the player, e.g. for measuring heart beat or leg activity

Definition statement

This group covers:

Wearable sensors which register a biosignal, such as electroencephalogram, or the motion of the player.

Communication between the input device and the game device is usually wireless, but can be wired.

Informative references

Attention is drawn to the following places, which may be of interest for search:

hand-held video game devices	A63F 13/92

A63F 13/213

comprising photodetecting means, e.g. cameras, photodiodes or infrared cells (A63F13/219, A63F13/655 take precedence)

Definition statement

This group covers:

Cameras and image sensors used in video games.

Photo-detecting means, e.g. photodiodes or infrared detectors, included in the game controller.

Typically, a camera is placed close to the main screen and registers the player's motions (see for example ref. 20 of the drawing). To ease tracking, fiducials such as objects with specific colours, shapes or reflectivity can be used. The output information is typically bi-dimensional. Alternatively, photodetecting means are included in the game controller and register the position of infrared light sources. Some imaging systems also provide depth information, using a range sensor, or using several cameras.
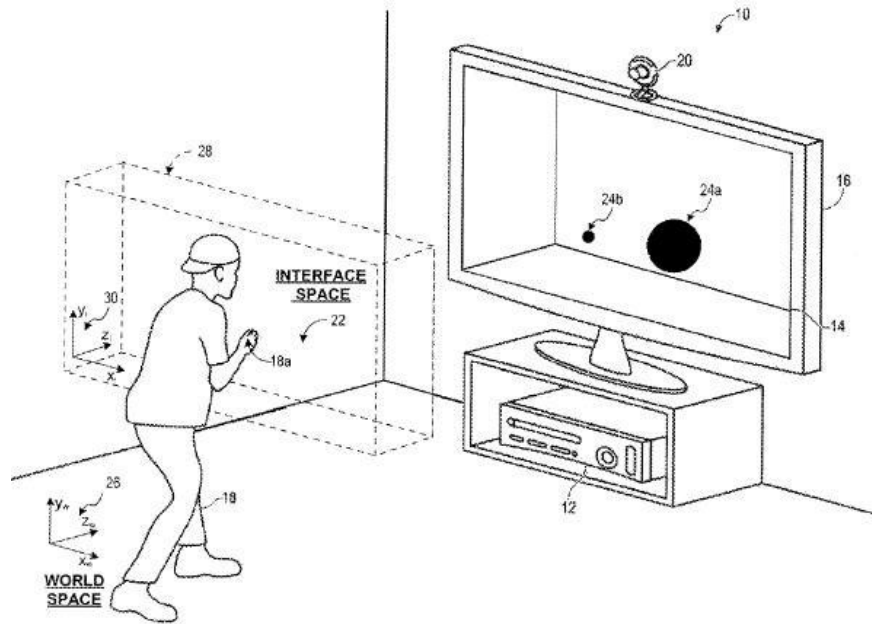
Informative references

Attention is drawn to the following places, which may be of interest for search:

photodetecting means used to detect where the game controller points to on the screen	A63F 13/219
image processing to generate game commands	A63F 13/42

A63F 13/214

for locating contacts on a surface, e.g. floor mats or touch pads

Definition statement

This group covers:

Sensors for detecting a variation of a physical quantity measured at a location on a surface.

Devices using a plurality of discrete switches, e.g. dance mats.

Detecting the location of player's fingers by non-contact methods, e.g. reflected light.
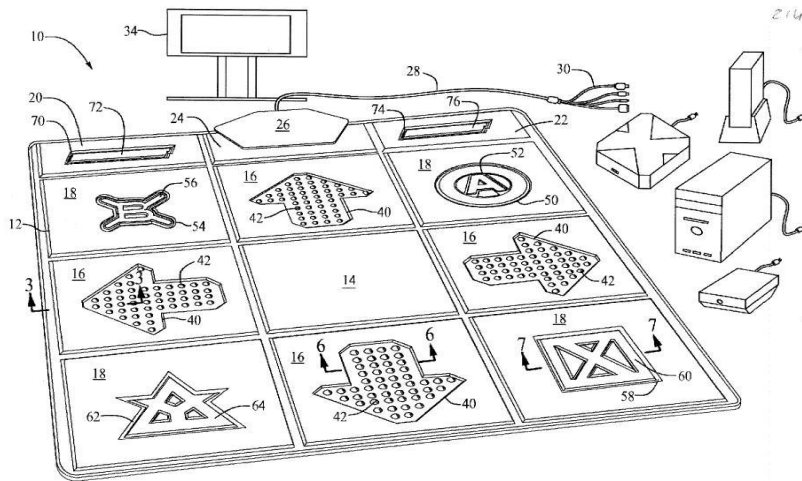
Informative references

Attention is drawn to the following places, which may be of interest for search:

contact sensors	A63F 13/218
game devices locating a contact using a camera	A63F 13/213
processing of position series to recognize a pattern or a trajectory	A63F 13/426

A63F 13/2145

the surface being also a display device, e.g. touch screens

Definition statement

This group covers:

Direct interactions with the game display. Typically, the screen and the sensor are provided in one form-factor. However, the display can be composed of a projector and a projecting surface, also used to detect contact.

Informative references

Attention is drawn to the following places, which may be of interest for search:

input device providing a touch screen as a secondary display	A63F 13/26

A63F 13/215

comprising means for detecting acoustic signals, e.g. using a microphone

Definition statement

This group covers:

Sensors allowing the player to enter a voice command, to sing or to blow. Microphone arrays used for source localization are also classified here.

Informative references

Attention is drawn to the following places, which may be of interest for search:

processing to convert the acoustic signal into game commands	A63F 13/424
beam-formers	H04R 3/00

A63F 13/216

using geographical information, e.g. location of the game device or player using GPS

Definition statement

This group covers:

Use of geographical information obtained directly, e.g. by GPS, or indirectly, e.g. by triangulation of cellular telephone base stations.

Use of geographical information as a game input, or for a "treasure hunt", or as a game parameter, e.g. for matching the day/night cycle of the game to local time.

A63F 13/219

for aiming at specific areas on the display, e.g. light-guns

Definition statement

This group covers:

Use of photo-sensing cells to detect scanning lines on a monitor screen and using synchronization information to calculate the scan line position at the time of detection.

Use of photo-sensing cells to detect IR emitters placed nearby the display.

A63F 13/22

Setup operations, e.g. calibration, key configuration or button assignment

Informative references

Attention is drawn to the following places, which may be of interest for search:

mapping of keys to a specific game's commands	A63F 13/42

A63F 13/23

for interfacing with the game device, e.g. specific interfaces between game controller and console

Definition statement

This group covers:

- Connectors specially adapted for video game input devices.
- Peripherals-to-port assignments.
- Methods to provide additional data on standard connection.
- Devices to allow more controllers than the number of ports on the game device.
- Arrangements to daisy-chain game controllers.

Informative references

Attention is drawn to the following places, which may be of interest for search:

other constructional details or arrangements of video game devices	A63F13/90
control or interface arrangements for pointing devices	G06F 3/038

A63F 13/235

using a wireless connection, e.g. infrared or piconet

Definition statement

This group covers:

- Wireless controllers
- Specific interface protocols, aspects regarding battery management, use of RFID and other wireless transponders for game data input.

Informative references

Attention is drawn to the following places, which may be of interest for search:

| small scale wireless networks; flat hierarchical wireless networks | H04W 84/10 |
| transmission through free space | H04B 10/10 |

A63F 13/24

Constructional details thereof, e.g. game controllers with detachable joystick handles

Definition statement

This group covers:

- Construction of input devices having several mechanical degrees of freedom, for example allowing rotation or twisting.

- Details of mechanical contact between elements of game controller, e.g. sliding or rotating contact.

Informative references

Attention is drawn to the following places, which may be of interest for search:

| apparatus modifying mechanically an input device | A63F 13/98 |

A63F 13/245

specially adapted to a particular type of game, e.g. steering wheels

Definition statement

This group covers:

Input devices mimicking real world objects, which are used in the game simulation such as steering wheels, pedals, throttles, guns, rifles, fishing rods, guitars, keyboards, drums.

Informative references

Attention is drawn to the following places, which may be of interest for search:

accessories attached to an input device	A63F 13/98

Special rules of classification within this subgroup

The type of game should be additionally classified under A63F 13/90.

A63F 13/25

Output arrangements for video game devices

Informative references

Attention is drawn to the following places, which may be of interest for search:

digital output to display devices	G06F 3/14
control of displays in general	G09G

A63F 13/26

having at least one additional display device, e.g. on the game controller or outside a game booth

Definition statement

This group covers:

Game controllers with a small-size display device, allowing to display additional views of the game or player-specific information.
Arcade game devices with additional display devices showing additional views, such as rear- or side-mirror view in a driving game or mounted outside a booth allowing spectators to watch the game.
Multi-screen game systems

A63F 13/28

responding to control signals received from the game device for affecting ambient conditions, e.g. for vibrating players' seats, activating scent dispensers or affecting temperature or light (controlling the output signals based on the game progress A63F 13/50)

References relevant to classification in this group

This group does not cover:

controlling visual or acoustic output signals based on the game progress	A63F 13/50

A63F 13/285

Generating tactile feedback signals via the game input device, e.g. force feedback

Definition statement

This group covers:

- Generating forces to give tactile feedback.
- Generating vibrations.

A63F 13/30

Interconnection arrangements between game servers and game devices; Interconnection arrangements between game devices; Interconnection arrangements between game servers

Informative references

Attention is drawn to the following places, which may be of interest for search:

interconnection arrangements in generic data networks	H04L

A63F 13/31

Communication aspects specific to video games, e.g. between several handheld game devices at close range

Informative references

Attention is drawn to the following places, which may be of interest for search:

communication control characterised by protocols	H04L 29/06

A63F 13/32

using local area network [LAN] connections

Informative references

Attention is drawn to the following places, which may be of interest for search:

LAN in general	H04L 12/28

A63F 13/323

between game devices with different hardware characteristics, e.g. handheld game devices connectable to game consoles or arcade machines

Definition statement

This group covers:

Communication between handheld game devices and a home game devices.

Communication between portable game devices and arcade machines.

Typically, the game devices are designed by the same company, which simplifies the data exchange. However, this group also covers communications between game devices with different hardware characteristics executing different Operating Systems.
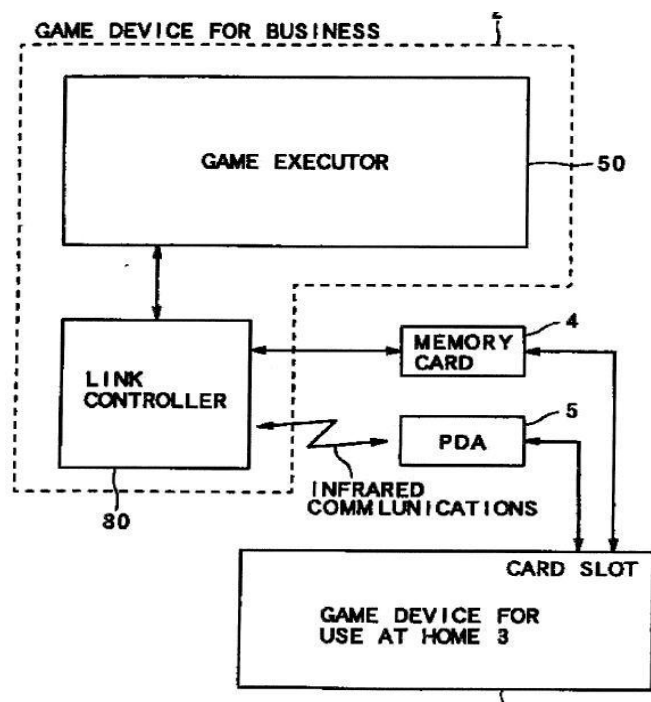
A63F 13/327

using wireless networks, e.g. Wi-Fi or piconet

Definition statement

This group covers:

Arrangements for locally connecting game devices using an air interface.

Connections based on standardized protocols are used such as IEEE 802.11 (WiFi) or Bluetooth.

Connections based on game device specific protocols using for example the Infrared interface of hand-held devices.
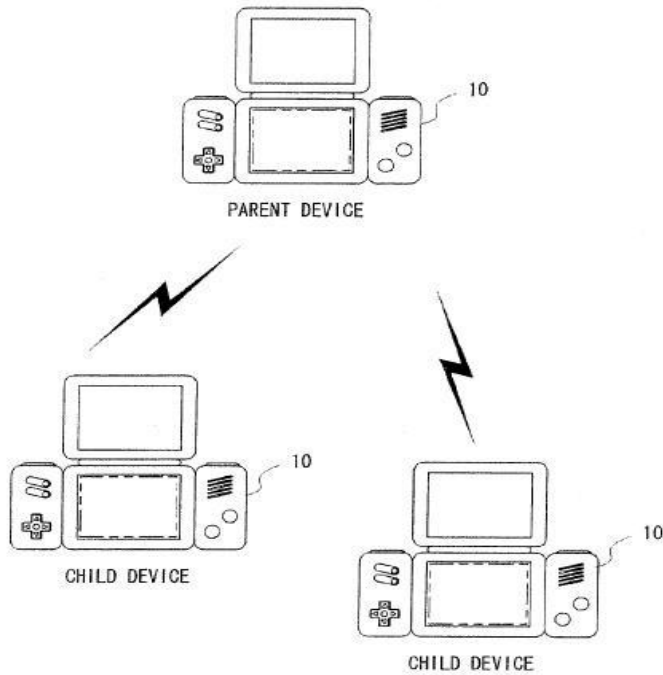
Informative references

Attention is drawn to the following places, which may be of interest for search:

small scale wireless networks; flat hierarchical wireless networks	H04W 84/10
transmission through free space	H04B 10/10

A63F 13/33

using wide area network [WAN] connections

Informative references

Attention is drawn to the following places, which may be of interest for search:

WAN in general	H04L 12/28

A63F 13/332

using wireless networks, e.g. cellular phone networks

Informative references

Attention is drawn to the following places, which may be of interest for search:

wireless communication networks	H04W

A63F 13/335

using Internet

Informative references

Attention is drawn to the following places, which may be of interest for search:

IP networks per se	H04L 29/06

A63F 13/338

using television networks

Informative references

Attention is drawn to the following places, which may be of interest for search:

interactive television	H04N 21/00

A63F 13/34

using peer-to-peer connections

Informative references

Attention is drawn to the following places, which may be of interest for search:

peer-to-peer networking in general	H04L 29/08

A63F 13/352

involving special game server arrangements, e.g. regional servers connected to a national server or a plurality of servers managing partitions of the game world

Definition statement

This group covers:

Arrangements of hierarchies of game servers and players.

In the exemplary drawing below, references 10, 12, 14, 20, 22, 24 show the different layers in the server hierarchy with increasing geographical coverage.
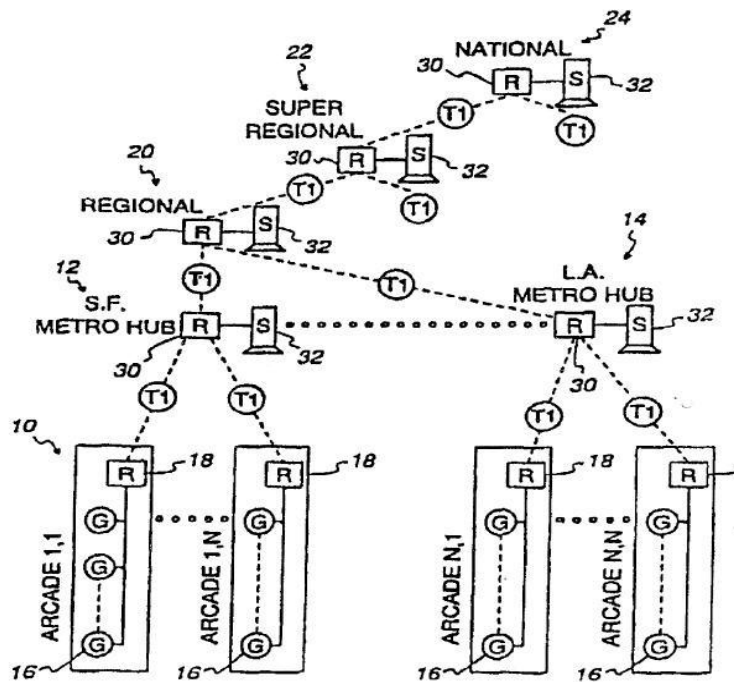
A63F 13/40

Processing input control signals of video game devices, e.g. signals generated by the player or derived from the environment

Definition statement

This group covers:

Aspects of the use of input signals for facilitating the game interaction process.

Relationship between large subject matter areas

Details of the generation of these signals, e.g. transduction from tactile or acoustic input, are classified in the corresponding function places.

References relevant to classification in this group

This group does not cover:

input arrangements for game devices	A63F 13/20

A63F 13/42

by mapping the input signals into game commands, e.g. mapping the displacement of a stylus on a touch screen to the steering angle of a virtual vehicle

Definition statement

This group covers:

The linear mapping of input signals into game commands.

The contextual, dynamic or non-linear mapping of signals received from an input switch or lever to game commands. For example, a fully inclined joystick might trigger a barrel roll instead of a simple turn:
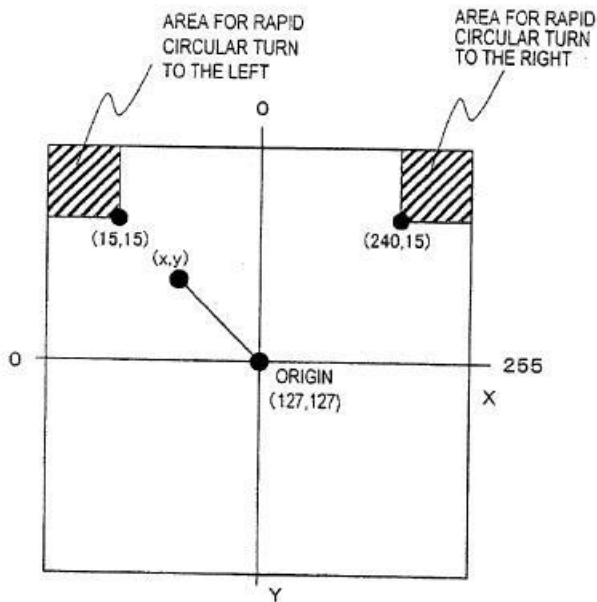
A63F 13/422

automatically for the purpose of assisting the player, e.g. automatic braking in a driving game

Definition statement

This group covers:

The insertion of additional commands in the command sequence, i.e. to produce combos, and correcting the player's input to improve her accuracy.

A63F 13/424

involving acoustic input signals, e.g. by using the results of pitch or rhythm extraction or voice recognition

References relevant to classification in this group

This group does not cover:

input arrangements for game devices comprising means for detecting acoustic signals	A63F 13/215
evaluation based on rhythm only	A63F 13/44

Informative references

Attention is drawn to the following places, which may be of interest for search:

evaluating musical performance in general	G10H 1/00
evaluating musical performance for karaoke	G10H 1/36
evaluating musical performance with respect to rhythm or tempo	G10H 1/40
evaluating musical performance with respect to pitch	G10H 3/12
speech recognition	G10L 15/00
microphones	H04R

A63F 13/426

involving on-screen location information, e.g. screen coordinates of an area at which the player is aiming with a light gun

Definition statement

This group covers:

Non-trivial mappings to game scene (e.g. use of 2D position for pointing to a game object in 3D environment), sequences of operations (e.g. drawing the trajectory of a sword on screen) and their recognition (e.g. symbol drawn to cast spell).

A63F 13/428

involving motion or position input signals, e.g. signals representing the rotation of an input controller or a player's arm motions sensed by accelerometers or gyroscopes

Definition statement

This group covers:

The processing of signals representing motion of the controller, e.g. swinging, as detected by accelerometers, to produce game commands.

The mapping of signals, e.g. from accelerometers, onto game object parameters.

Detection and recognition of sequences of operation, e.g. rotating a controller such as a lever for 720 degrees.

Noise resistant procedures.
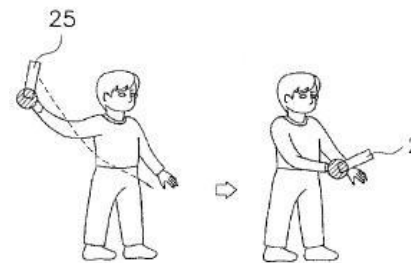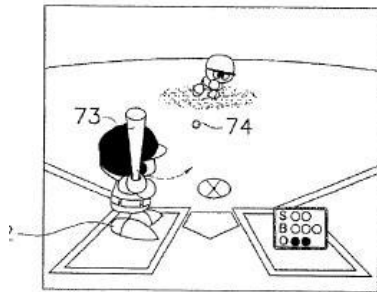
References relevant to classification in this group

This group does not cover:

input arrangements for game devices using inertial sensors	A63F 13/211

A63F 13/44

involving timing of operations, e.g. performing an action within a time slot

Definition statement

This group covers:

Evaluation of timing actions, e.g. in rhythm games, time-dependent sequences of commands, e.g. combos, and the displays associated to timing.

In the exemplary drawing below, each time slot T1, T2, T3, T4 has subdivisions defining the optimal timing of an action.
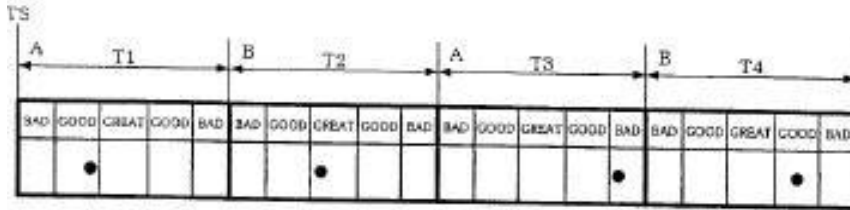
A63F 13/46
Computing the game score

Definition statement

This group covers:

Details of scoring methods, such as fuzzy evaluations of score, management of experience points or rewards scheme.
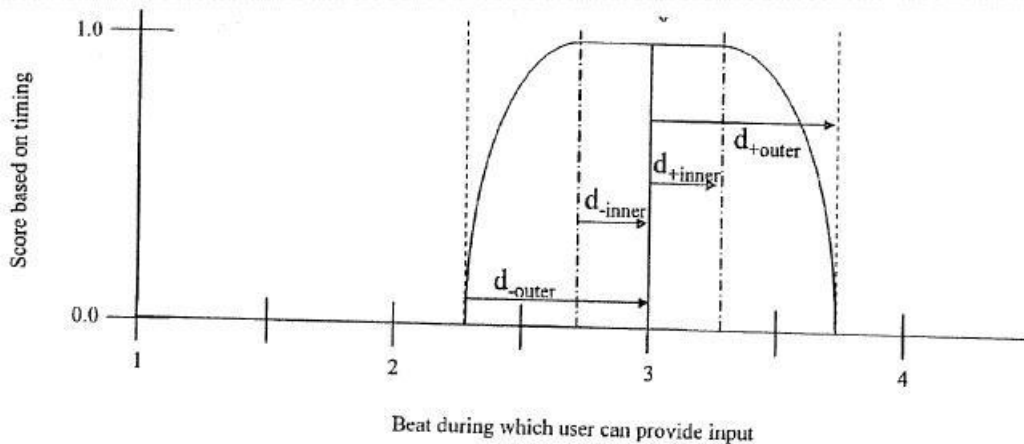
Beat during which user can provide input

Informative references

Attention is drawn to the following places, which may be of interest for search:

comparisons of scores and rankings	A63F 13/798

A63F 13/47

involving branching, e.g. choosing one of several possible scenarios at a given point in time

Definition statement

This group covers:

The control of the game's narrative. A narrative structure can be implemented trivially as a sequence, but also as a tree or as a set of goals or tasks randomly assigned to NPC, to provide nonlinear gameplay.

The exemplary drawing below shows different branching points in the narrative (410,420,430) with the possible alternative segments.
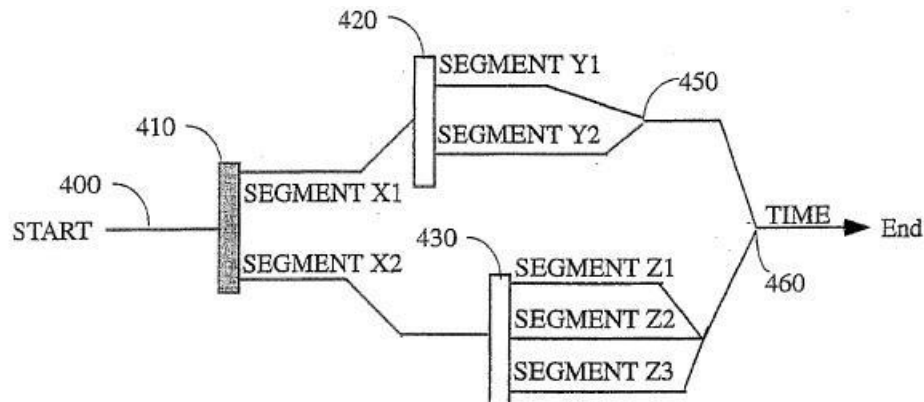
A63F 13/49

Saving the game status; Pausing or ending the game

Definition statement

This group covers:

The storage of game data in internal or external memory. Both "save" and "pause" commands can be triggered by the player or automatically, e.g. pausing when receiving a phone call on the same device or auto-save feature. Typically, a multiplayer game played over a network requires a protocol to pause or end the game. For instance, a player closes her own handheld apparatus. Prior to setting of a sleep mode, the game apparatus notifies all other game apparatuses of the interruption of the communication game, and then the game apparatus saves parameters necessary to execute a game main processing program to interrupt the execution of the game main processing program.

A63F 13/493

Resuming a game, e.g. after pausing, malfunction or power failure

Definition statement

This group covers:

Methods for retrieving game status and value of the game parameters as they were when the game was suspended

Methods for compensating discontinuities in memory or input when resuming. For instance, if a game using a controller with a tilt sensor is paused, then the change of position during pause will cause a discontinuity in the input coordinates.

A63F 13/497

Partially or entirely replaying previous game actions

Definition statement

This group covers:

Backward replay allowing the player to roll back to a previous state, e.g. before her character's death.

Forward replay allowing to display past game events.

Summary or recap techniques for shortening the replay.

A63F 13/50

Controlling the output signals based on the game progress

Definition statement

This group covers:

Aspects of the use of such signals for facilitating the game interaction process.

Use of signals not directed to the screen or the speakers.

A63F 13/52

involving aspects of the displayed game scene

Informative references

Attention is drawn to the following places, which may be of interest for search:

two dimensional image generation	G06T 11/00
animation in general	G06T 13/00
three dimensional image rendering	G06T 15/00

A63F 13/525

Changing parameters of virtual cameras

Definition statement

This group covers:

The control of virtual cameras to facilitate the interactions between the player and the game.

The use of game variables for this control. For instance, in a fighting game, the camera can be placed closer to the fighter with the lowest life meter.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Navigation in three-dimensional environments	G06T 19/00

A63F 13/5252

using two or more virtual cameras concurrently or sequentially, e.g. automatically switching between fixed virtual cameras when a character changes room or displaying a rear-mirror view in a car-driving game

Definition statement

This group covers:

Techniques that enable rendering of scenes from multiple perspectives.

In the exemplary drawing below, virtual cameras 401, 402 are placed on both sides of the wall, allowing rendering the scene from 2 perspectives (figure (b), (c))
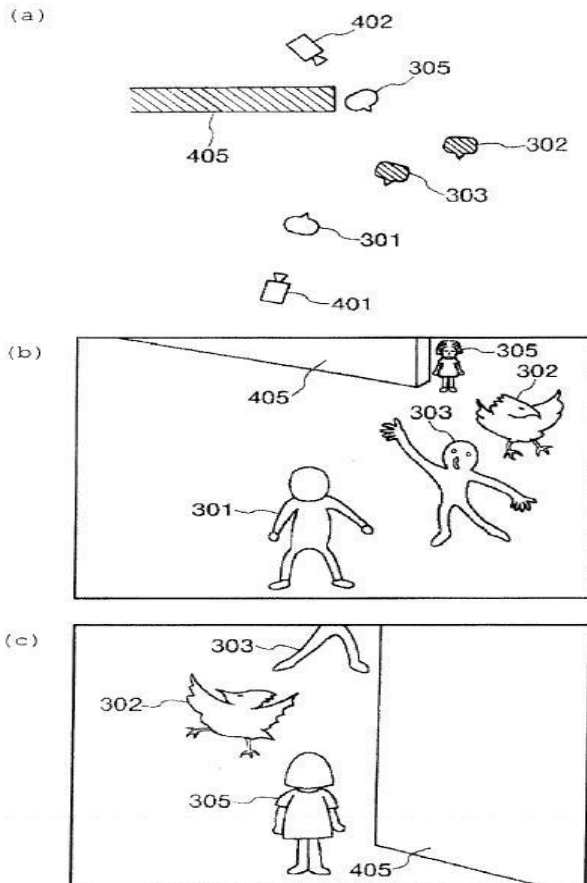
A63F 13/5255

according to dedicated instructions from a player, e.g. using a secondary joystick to rotate the camera around a player's character

Definition statement

This group covers:

Direct control of the camera by the player to e.g. resolve projection ambiguities or occlusions. This control can be explicit, e.g. using a dedicated lever, or implicit. For instance, the orientation of the virtual camera can be set to the real orientation of a camera, to produce an augmented reality game. Alternatively, the head of the player can be tracked and the virtual viewpoint's position be updated accordingly, to produce an autostereoscopic display.

In the exemplary drawing below, the player can select view 160A or 160B using the input device 120.
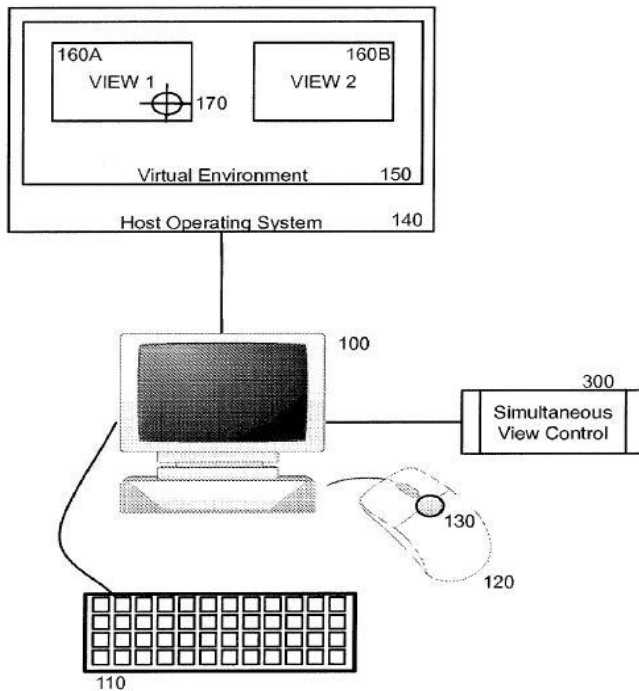
A63F 13/5258

by dynamically adapting the position of the virtual camera to keep a game object or game character in its viewing frustum, e.g. for tracking a character or a ball

Definition statement

This group covers:

Methods for setting dynamical parameters of the virtual camera according to the dynamical parameters of a game object or character, allowing to implement cinematographic camera effects in video games.

Typically, speeds will be similar but the virtual camera may accelerate or decelerate according to a predefined game event. The relative height or angle of the virtual camera provides also the desired view of the game scene.

For example, if the player's car approaches an obstacle such as a tree or building, the viewpoint is positioned to quickly approach the player's car by increasing the moving speed.

In the further exemplary drawing below, virtual camera C tracks the virtual skier and changes its height and direction between C1 and C2 according to the game course.
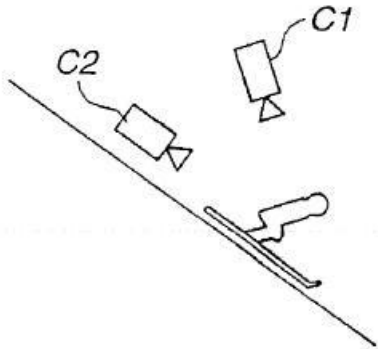
A63F 13/53

involving additional visual information provided to the game scene, e.g. by overlay to simulate a head-up display [HUD] or displaying a laser sight in a shooting game

Definition statement

This group covers:

The display of game state variables which are not expressed in the game scene or of information to improve the game-player interaction. For instance, a magnified view of the target is displayed in a shooting game or a gauge for controlling the timing of the pitch in a baseball game.
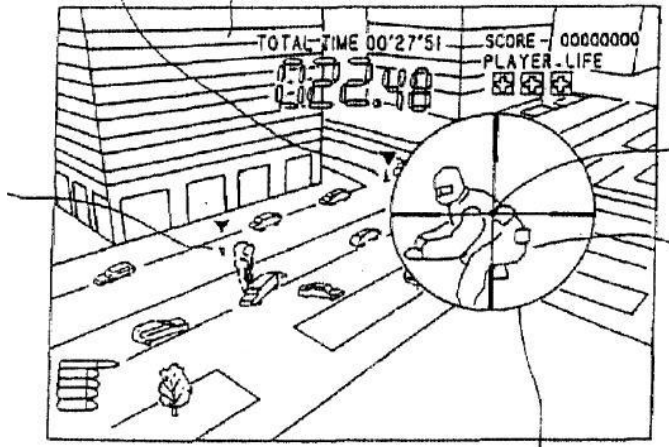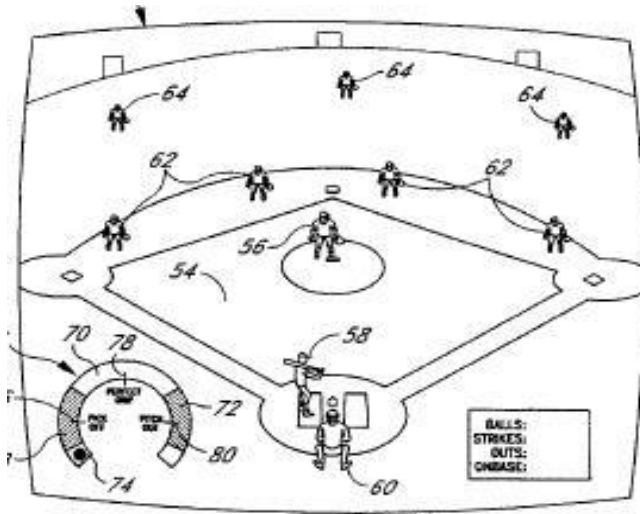
A63F 13/533

for prompting the player, e.g. by displaying a game menu

Definition statement

This group covers:

Methods for prompting the player by presenting a display of control buttons, a keyboard, a menu, or the like.

Informative references

Attention is drawn to the following places, which may be of interest for search:

interactions techniques for graphical user interfaces	G06F 3/048

A63F 13/537

using indicators, e.g. showing the condition of a game character on screen

Definition statement

This group covers:

Indicators related to the experience or health of characters, for example, power gauges and life indicators.
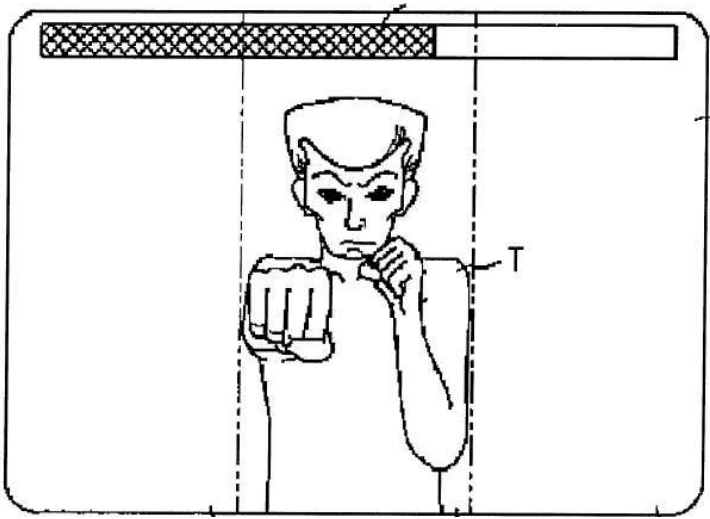
A63F 13/5372

for tagging characters, objects or locations in the game scene, e.g. displaying a circle under the character controlled by the player

Definition statement

This group covers:

Indicators used to show the current selection or the target for the next game command. The selection can be controlled by the player, or automatic, e.g. highlighting the closest team member in a soccer game.
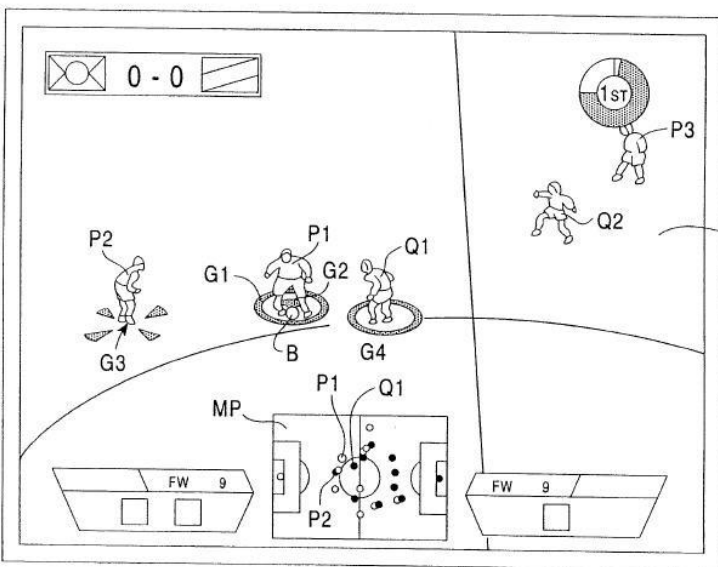
A63F 13/5375

for graphically or textually suggesting an action, e.g. by displaying an arrow indicating a turn in a driving game

Definition statement

This group covers:

Techniques to help the player choosing her next command. Typically, a textual advice or a drawing of the game controller is overlaid. It is also used to provide information on a part of the game scene which is not visible on the screen, e.g. the position of the soccer team members on the field.

Hints as part of an in-game tutorial.

Indicators linked to an object in the scene.
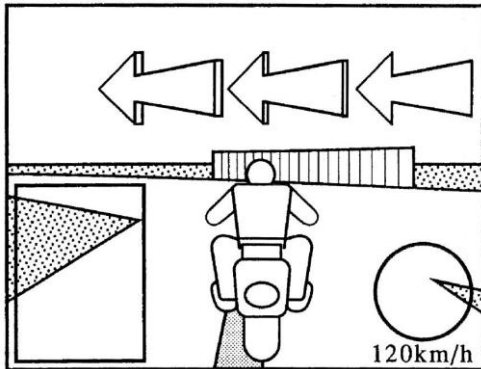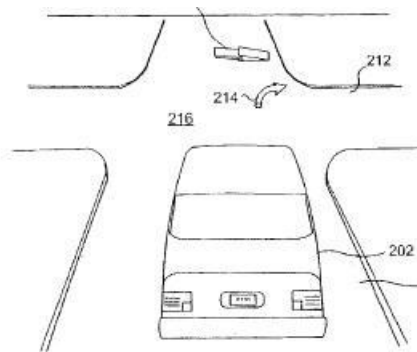
Informative references

Attention is drawn to the following places, which may be of interest for search:

indicator expressing the timing of operation	A63F 13/44

A63F 13/5378

for displaying an additional top view, e.g. radar screens or maps (using two or more virtual cameras concurrently A63F 13/5252)

Definition statement

This group covers:

Overlaid windows with a two-dimensional map of the game scene.
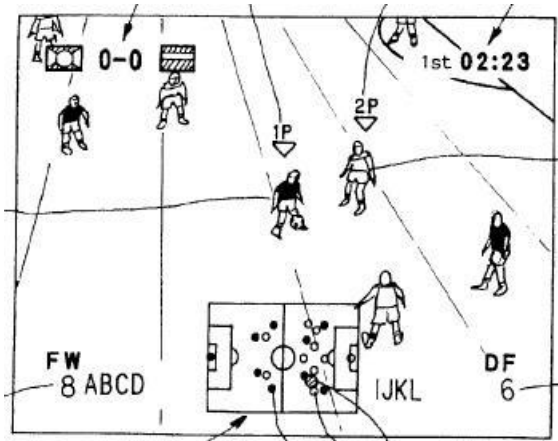
References relevant to classification in this group

This group does not cover:

Using two or more virtual cameras concurrently	A63F 13/5252

A63F 13/54

involving acoustic signals, e.g. for simulating revolution-dependent engine sounds in a driving game or reverberation against a virtual wall

Definition statement

This group covers:

Sound effects in video games.

In the first example below, sound characteristics are generated depending on the status of the car (idling, moving). In the second example, the reverberation from obstacles 901, 902 is be simulated.
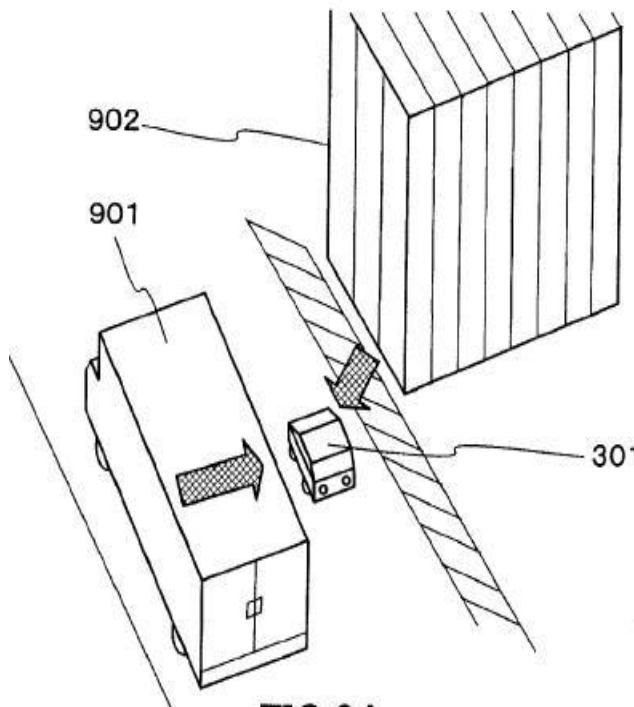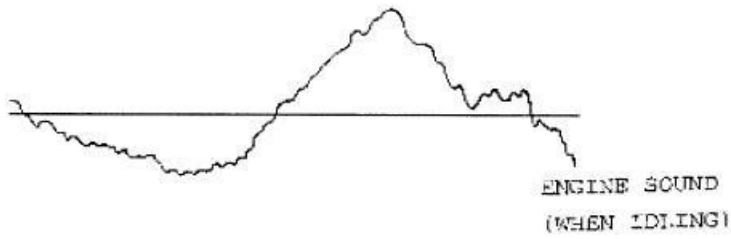
ENGINE SOUND
(WHEN IDLING)

902

901

301

Informative references

Attention is drawn to the following places, which may be of interest for search:

sound-producing devices	G10H, G10K, H04R

A63F 13/55

Controlling game characters or game objects based on the game progress

Informative references

Attention is drawn to the following places, which may be of interest for search:

animation in general	G06T 13/00
3d image rendering	G06T 15/00

A63F 13/56

Computing the motion of game characters with respect to other game characters, game objects or elements of the game scene, e.g. for simulating the behaviour of a group of virtual soldiers or for path finding

Definition statement

This group covers:

Methods for moving automatically non-player characters in the game scene according to the game progress. For example, virtual soldiers follow their leaders in a strategy games or virtual soccer characters are positioned to receive or intercept the ball.

In the first example below, characters 51 and 52 are moving automatically to a location according to player input on a touch screen. In the other example, non-player characters 11 and 12 are approaching automatically the player character.
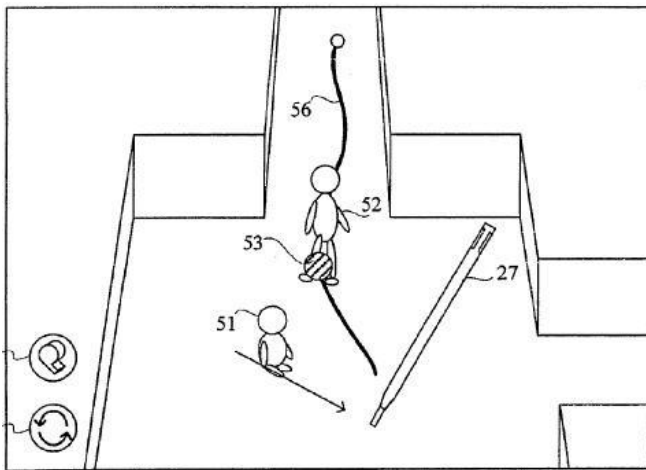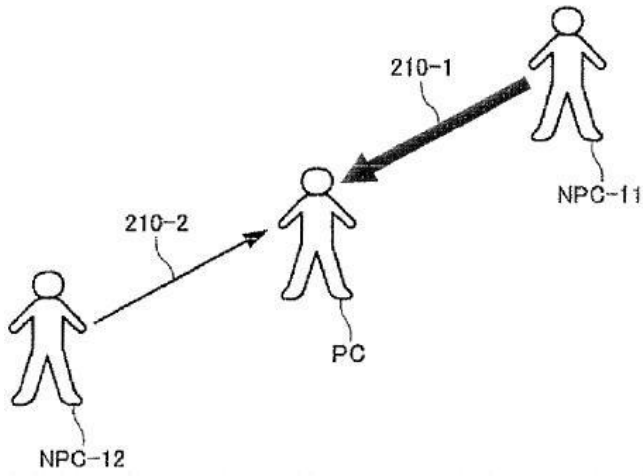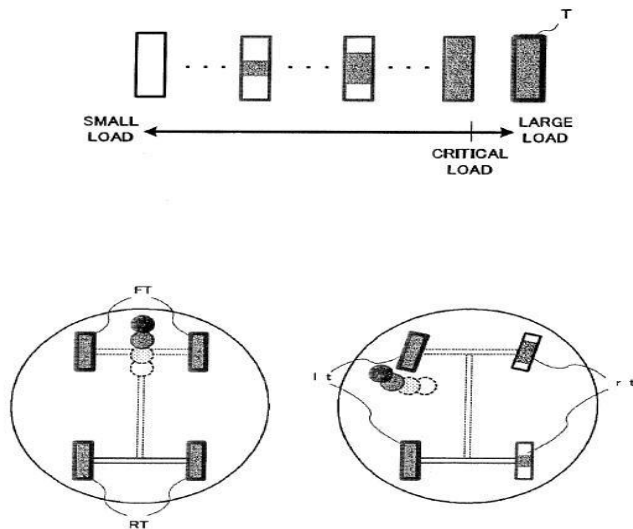
A63F 13/57

Simulating properties, behaviour or motion of objects in the game world, e.g. computing tyre load in a car race game (A63F 13/56 takes precedence)

Definition statement

This group covers:

Techniques for simulating the law of physics applied to game objects

In the example below, tyre load (front, rear, left or right) is computed according to the longitudinal or transversal acceleration of the virtual racing car and indicated by the shading.
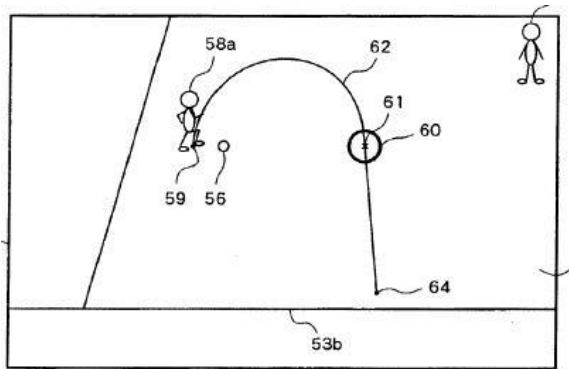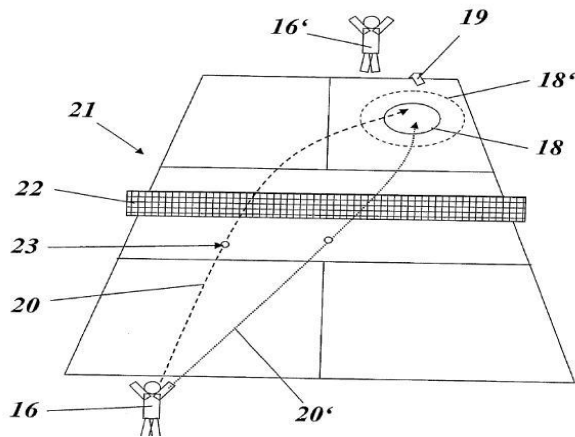
A63F 13/573

using trajectories of game objects, e.g. of a golf ball according to the point of impact

Definition statement

This group covers:

The impact of calculated trajectories on the game process.

In the examples below, the trajectories of the tennis or soccer ball are used to determine the landing point on the game field.

A63F 13/577

using determination of contact between game characters or objects, e.g. to avoid collision between virtual racing cars

Definition statement

This group covers:

The determination if an object or character has entered the collision zone of other objects or characters.
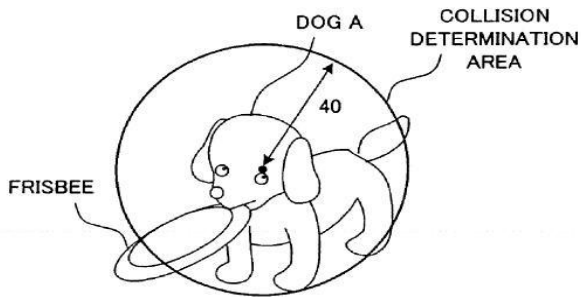
The triggering of a corresponding game action if collision has occurred.

In the examples below, the results of collision determination are used to find out if the player character has broken a glass surface with a ball, has been hit by an arrow or could catch a flying object.
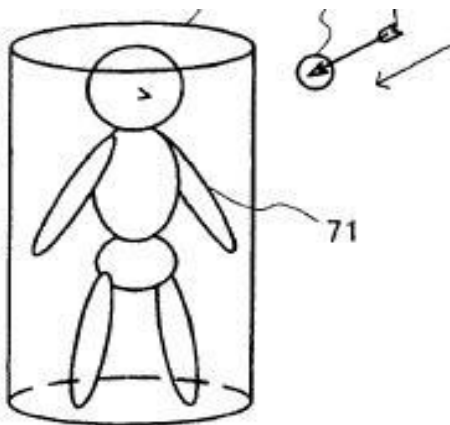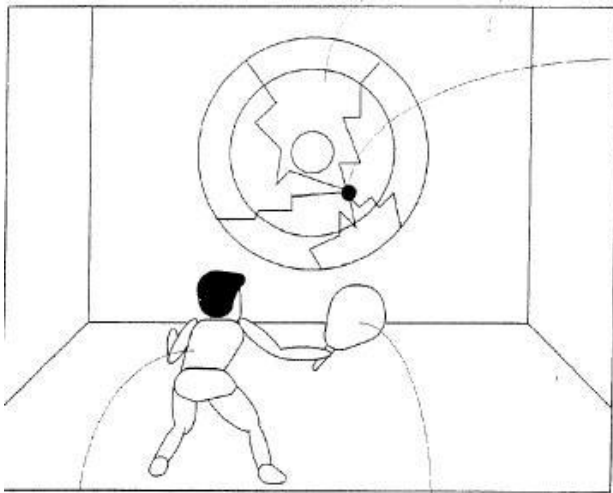
Informative references

Attention is drawn to the following places, which may be of interest for search:

collision detection in image processing	G06T19/00

A63F 13/58

by computing conditions of game characters, e.g. stamina, strength, motivation or energy level
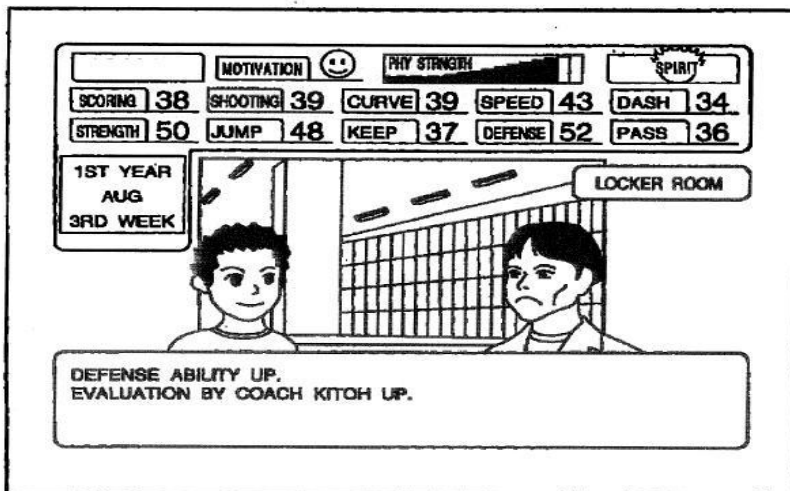
Definition statement

This group covers:

The computation of parameters associated with game characters, which need to be continuously updated in the game course.

The use of those parameters to influence the game course as they typically have a significant impact on the outcome of the game.

The dashboard of the exemplary drawing below shows the different skill parameters of a game character in a soccer video game.

A63F 13/61

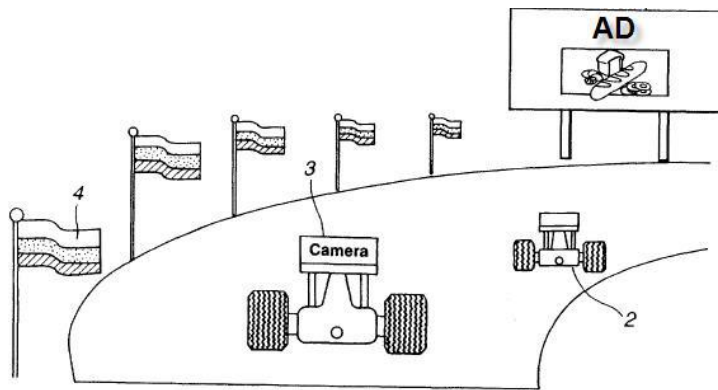**using advertising information**

Definition statement

This group covers:

Techniques for embedding advertising information in video games.

Techniques for associating advertising information to video games.

In the example below, a virtual billboard displays an advertisement in a video racing game.

Informative references

Attention is drawn to the following places, which may be of interest for search:

advertising per se	G09F
marketing, e.g. advertising	G06Q30/02

A63F 13/63

by the player, e.g. authoring using a level editor

Definition statement

This group covers:

Means allowing the player to create new game items, or to add music or a personalised sound track to the game.

A63F 13/65

automatically by game devices or servers from real world data, e.g. measurement in live racing competition

Definition statement

This group covers:

Collecting images and data from real world games, races, etc., and the processing and use of this information to create a virtual event, for example a race between a player's virtual car and real cars.

A63F 13/655

by importing photos, e.g. of the player
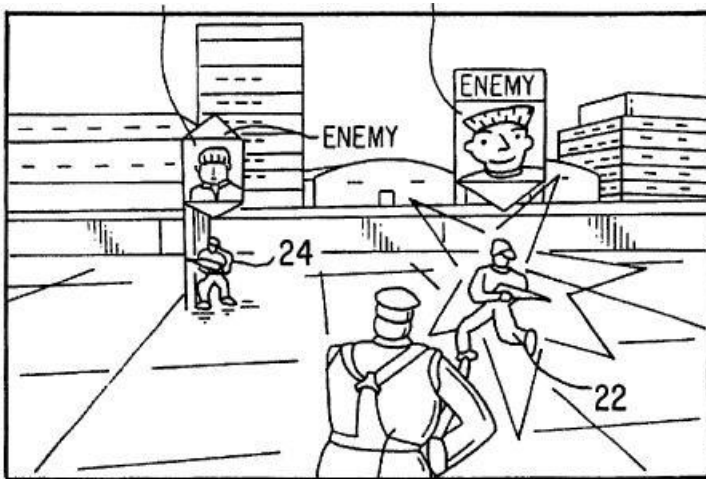
Definition statement

This group covers:

Techniques for embedding photos in video games.

Techniques for associating photos to video games.

In the example below, photos of other players are used to tag enemy characters 22 and 24.

References relevant to classification in this subgroup

input arrangements for game device comprising photodetecting means	A63F 13/213

A63F 13/67

adaptively or by learning from player actions, e.g. skill level adjustment or by storing successful combat sequences for re-use

Definition statement

This group covers:

- Simulation of cognitive functions for NPC
- Artificial intelligence game engines
- Automatic adaptation of the game difficulty to the player's skill and style of play

A63F 13/71

using secure communication between game devices and game servers, e.g. by encrypting game data or authenticating players

Informative references

Attention is drawn to the following places, which may be of interest for search:

network security	H04L 29/06

A63F 13/73

Authorising game programs or game devices, e.g. checking authenticity

Definition statement

This group covers:

- Techniques restricting player access to game devices

- Techniques restricting access to the content of a game recording medium

- Techniques restricting access to game information files, being stored locally or distributed via a network.

In the example below, security devices 710 are entitled by a gaming authority 760 and provide conditional access to game device 702.

Informative references

Attention is drawn to the following places, which may be of interest for search:
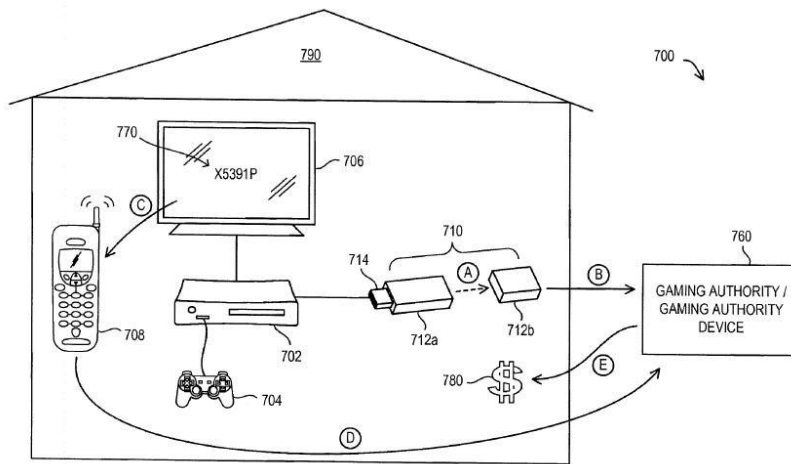
computer security	G06F 21/00

A63F 13/75

Enforcing rules, e.g. detecting foul play or generating lists of cheating players

Definition statement

This group covers:

The detection and classification of player's activity into foul play and the imposition of game penalties.

A63F 13/77
involving data related to game devices or game servers, e.g. configuration data, software version

Definition statement

This group covers:

Techniques for executing or distributing game software based on hardware of software characteristics of game servers or game devices

A63F 13/792

for payment purposes, e.g. monthly subscriptions

Informative references

Attention is drawn to the following places, which may be of interest for search:

payment protocols	G06Q 20/00
apparatus actuated by coins or the like for games	G07F 17/32

A63F 13/795

for finding other players; for building a team; for providing a buddy list

Definition statement

This group covers:

- Inviting players to multi-player games running on a network.

- Associating players with a group of players based on preferences.

- Using information from social network services in a game.

A63F 13/798

for assessing skills or for ranking players, e.g. for generating a hall of fame (computing the game score A63F 13/46)

Definition statement

This group covers:

Evaluating players and producing ranking lists in multi-player games running on a network.

References relevant to classification in this group

This group does not cover:

computing the game score	A63F 13/46

A63F 13/803

Driving vehicles or craft, e.g. cars, airplanes, ships, robots or tanks

Informative references

Attention is drawn to the following places, which may be of interest for search:

| simulators for teaching control of vehicles or other crafts	G09B 9/02

A63F 13/814

Musical performances, e.g. by evaluating the player's ability to follow a notation

Informative references

Attention is drawn to the following places, which may be of interest for search:

evaluating musical performance in general	G10H 1/00
evaluating musical performance for karaoke	G10H 1/36
evaluating musical performance for rhythm or tempo	G10H 1/40
evaluating musical performance for pitch	G10H 3/12

A63F 13/843

involving concurrently two or more players on the same game device, e.g. requiring the use of a plurality of controllers or of a specific view of game data for each player

Definition statement

This group covers:

Techniques for providing multiplayer games on the same game device by offering each player her own input device. Typically, a different view is displayed for each character on a different output area of the display device if they are too far one from the other, and a single view is used when the characters are close enough.

In the examples below, the screen is subdivided horizontally or vertically into two regions, allowing to render the game from the perspective of each of the two players.
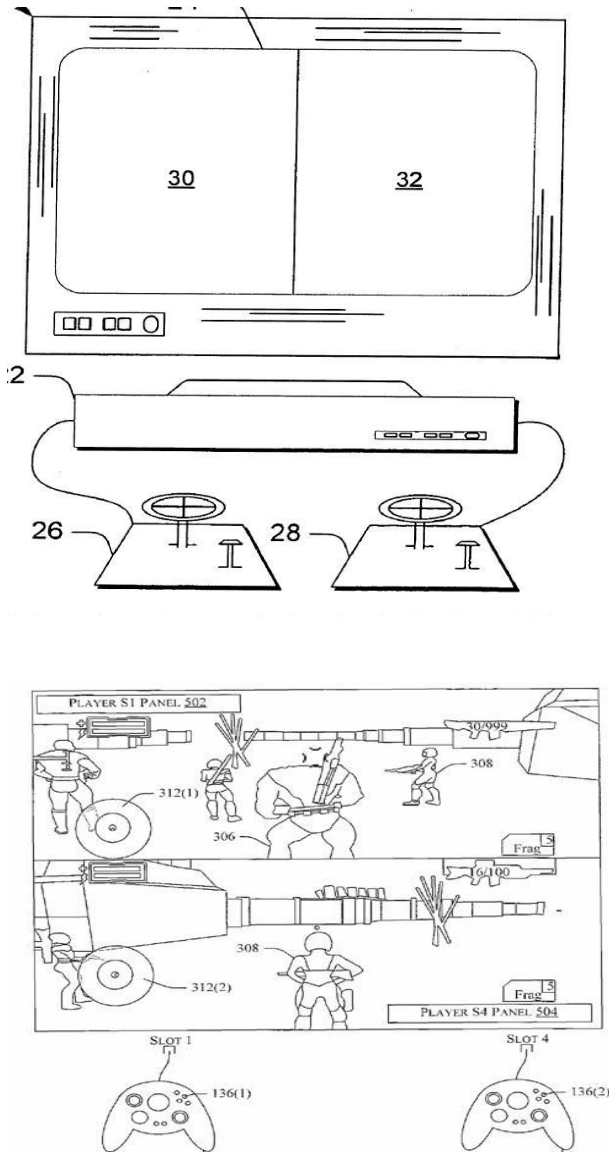
A63F 13/87

Communicating with other players during game play, e.g. by e-mail or chat

Definition statement

This group covers:

The use of peer-to-peer or one-to-many communications in multi-player games running on a network.
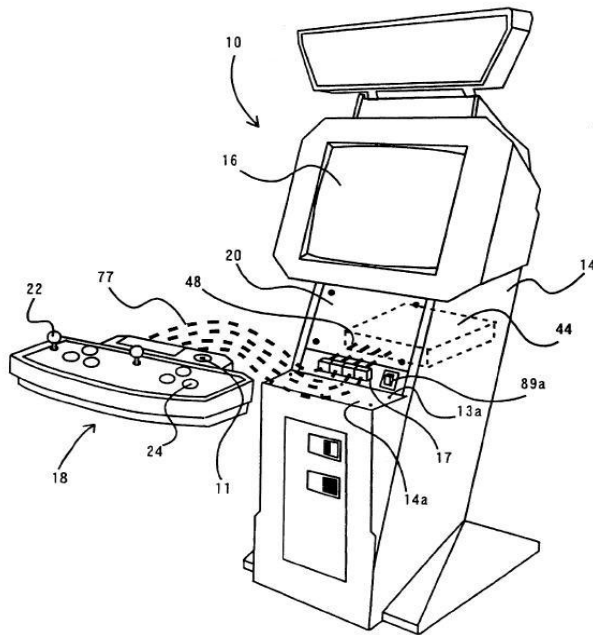
A63F 13/90

Constructional details or arrangements of video game devices not provided for in groups A63F 13/20 or A63F 13/25, e.g. housing, wiring, connections or cabinets

Definition statement

This group covers:

Structural or electrical aspects of the game device hardware.

In the example below, an arcade machine has changeable input means, which can be fixed to the housing but later replaced if the type of game changes.

References relevant to classification in this group

This group does not cover:

input arrangements of video game devices	A63F 13/20
output arrangements of video game devices	A63F 13/25

Informative references

Attention is drawn to the following places, which may be of interest for search:

constructional details of input arrangements	A63F 13/24

54

A63F 13/92

Video game devices specially adapted to be hand-held while playing

Definition statement

This group covers:

Dedicated game devices, where the form factor, size, weight, button arrangements or compact design make them suitable to be held at least in a hand. Such devices depart from generic hand-held devices, such as PDA or mobile phones, which can run games but are not specially designed for playing.

A63F 13/95

**Storage media specially adapted for storing game information, e.g. video game cartridges**

Definition statement

This group covers:

- Recording medium specially adapted to game devices

- Use of storage medium before, during or after game execution, e.g. game loading from a disk

In the example below, a dedicated game cartridge storing a game program can be inserted into a game machine.
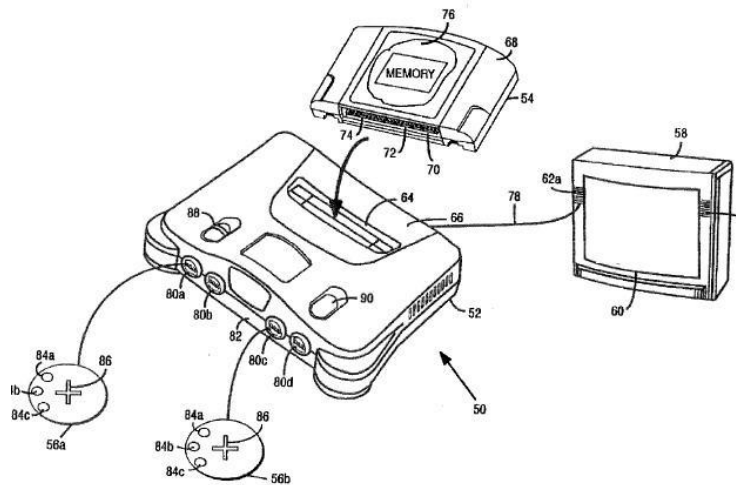
A63F 13/98

Accessories, i.e. detachable arrangements optional for the use of the video game device, e.g. grip supports of game controllers

Definition statement

This group covers:

Accessories, which are optional for playing the game (i.e. as opposed to input means, which are essential). They may add for example comfort or convenience to the game experience.

In the examples below, accessories are used to support a hand-held game device or a game controller.
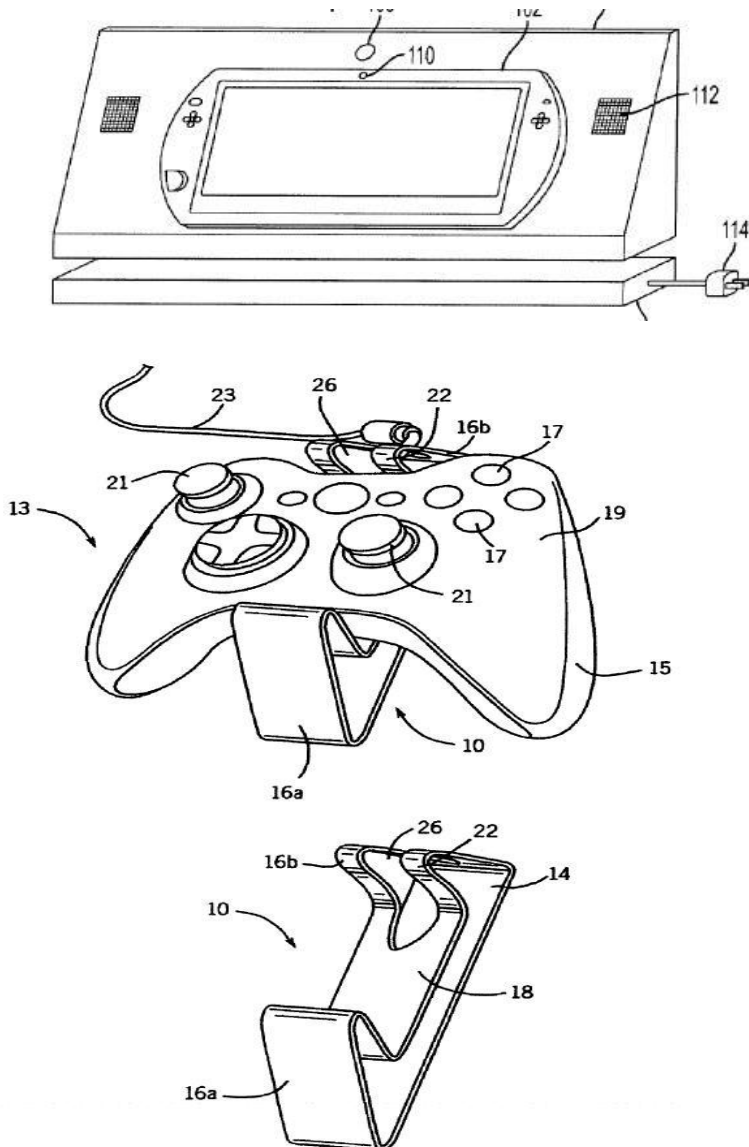
Informative references

Attention is drawn to the following places, which may be of interest for search:

input arrangements for game devices	A63F 13/20
output arrangements for game devices	A63F 13/25

3.   REVISION CONCORDANCE LIST (RCL)

From CPC Symbol	**To CPC Symbol**
A63F 13/00	A63F 13/00, A63F 13/25 – A63F 13/285, A63F 13/44, A63F 13/50 – A63F 13/798

4. CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)

CPC	IPC	Action
A63F 13/20	A63F 13/20	ADD
A63F 13/21	A63F 13/21	ADD
A63F 13/211	A63F 13/211	ADD
A63F 13/212	A63F 13/212	ADD
A63F 13/213	A63F 13/213	ADD
A63F 13/214	A63F 13/214	ADD
A63F 13/2145	A63F 13/2145	ADD
A63F 13/215	A63F 13/215	ADD
A63F 13/216	A63F 13/216	ADD
A63F 13/217	A63F 13/217	ADD
A63F 13/218	A63F 13/218	ADD
A63F 13/219	A63F 13/219	ADD
A63F 13/22	A63F 13/22	ADD
A63F 13/23	A63F 13/23	ADD
A63F 13/235	A63F 13/235	ADD
A63F 13/24	A63F 13/24	ADD
A63F 13/245	A63F 13/245	ADD
A63F 13/25	A63F 13/25	ADD
A63F 13/26	A63F 13/26	ADD
A63F 13/27	A63F 13/27	ADD
A63F 13/28	A63F 13/28	ADD
A63F 13/285	A63F 13/285	ADD
A63F 13/30	A63F 13/30	ADD
A63F 13/31	A63F 13/31	ADD
A63F 13/32	A63F 13/32	ADD
A63F 13/323	A63F 13/323	ADD
A63F 13/327	A63F 13/327	ADD
A63F 13/33	A63F 13/33	ADD
A63F 13/332	A63F 13/332	ADD
A63F 13/335	A63F 13/335	ADD
A63F 13/338	A63F 13/338	ADD
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A63F 13/358	A63F 13/358	ADD
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A63F 13/42	A63F 13/42	ADD
A63F 13/422	A63F 13/422	ADD
A63F 13/424	A63F 13/424	ADD
A63F 13/426	A63F 13/426	ADD
A63F 13/428	A63F 13/428	ADD
A63F 13/44	A63F 13/44	ADD
A63F 13/45	A63F 13/45	ADD
A63F 13/46	A63F 13/46	ADD

A63F 13/47	A63F 13/47	ADD
A63F 13/48	A63F 13/48	ADD
A63F 13/49	A63F 13/49	ADD
A63F 13/493	A63F 13/493	ADD
A63F 13/497	A63F 13/497	ADD
A63F 13/50	A63F 13/50	ADD
A63F 13/52	A63F 13/52	ADD
A63F 13/525	A63F 13/525	ADD
A63F 13/5252	A63F 13/5252	ADD
A63F 13/5255	A63F 13/5255	ADD
A63F 13/5258	A63F 13/5258	ADD
A63F 13/53	A63F 13/53	ADD
A63F 13/533	A63F 13/533	ADD
A63F 13/537	A63F 13/537	ADD
A63F 13/5372	A63F 13/5372	ADD
A63F 13/5375	A63F 13/5375	ADD
A63F 13/5378	A63F 13/5378	ADD
A63F 13/54	A63F 13/54	ADD
A63F 13/55	A63F 13/55	ADD
A63F 13/56	A63F 13/56	ADD
A63F 13/57	A63F 13/57	ADD
A63F 13/573	A63F 13/573	ADD
A63F 13/577	A63F 13/577	ADD
A63F 13/58	A63F 13/58	ADD
A63F 13/60	A63F 13/60	ADD
A63F 13/61	A63F 13/61	ADD
A63F 13/63	A63F 13/63	ADD
A63F 13/65	A63F 13/65	ADD
A63F 13/655	A63F 13/655	ADD
A63F 13/67	A63F 13/67	ADD
A63F 13/69	A63F 13/69	ADD
A63F 13/70	A63F 13/70	ADD
A63F 13/71	A63F 13/71	ADD
A63F 13/73	A63F 13/73	ADD
A63F 13/75	A63F 13/75	ADD
A63F 13/77	A63F 13/77	ADD
A63F 13/79	A63F 13/79	ADD
A63F 13/792	A63F 13/792	ADD
A63F 13/795	A63F 13/795	ADD
A63F 13/798	A63F 13/798	ADD
A63F 13/80	A63F 13/80	ADD
A63F 13/803	A63F 13/803	ADD
A63F 13/807	A63F 13/807	ADD
A63F 13/812	A63F 13/812	ADD
A63F 13/814	A63F 13/814	ADD
A63F 13/816	A63F 13/816	ADD
A63F 13/818	A63F 13/818	ADD
A63F 13/822	A63F 13/822	ADD
A63F 13/825	A63F 13/825	ADD
A63F 13/828	A63F 13/828	ADD
A63F 13/833	A63F 13/833	ADD

DATE: SEPTEMBER 1, 2014

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A63F 13/837	A63F 13/837	ADD
A63F 13/843	A63F 13/843	ADD
A63F 13/847	A63F 13/847	ADD
A63F 13/85	A63F 13/85	ADD
A63F 13/86	A63F 13/86	ADD
A63F 13/87	A63F 13/87	ADD
A63F 13/88	A63F 13/88	ADD
A63F 13/90	A63F 13/90	ADD
A63F 13/92	A63F 13/92	ADD
A63F 13/95	A63F 13/95	ADD
A63F 13/98	A63F 13/98	ADD

5. CROSS-REFERENCE LIST (CRL)

Scheme references impacted by this revision project

Location of reference to be changed	Referenced subclass or group to be changed	Change
G10H2220/315	A63F13/06	Change A63F13/06 to A63F13/20
H04L29/08306	A63F13/12	Change A63F13/12 to A63F13/34
H04L29/08558	A63F13/12	Change A63F13/12 to A63F13/30
H04L67/104	A63F13/12	Change A63F13/12 to A63F13/34
H04L67/12	A63F13/12	Change A63F13/12 to A63F13/30

Definitions references impacted by this revision project

Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Change
A63B24/0084	A63F13/12	Informative References	Change A63F13/12 to A63F13/30
A63F2300/1043	A63F13/08	Informative References	Change A63F13/08 to A63F13/90
A63F2300/558	A63F13/61	Limiting References	Change A63F13/61 to A63F13/46
G05G	A63F13/02	Definition statement	Change A63F13/02 to A63F13/98
G06F3/011	A63F13/06	Limiting References	Change A63F13/06 to A63F13/20
G06T19/003	A63F13/10	Informative References	Change A63F13/10, A63F13/12 to A63F13/803
H04L67/104	A63F13/12	Limiting References	Change A63F13/12 to A63F13/34
H04L67/12	A63F13/12	Informative References	Change A63F13/12 to A63F13/30