

# CPC COOPERATIVE PATENT CLASSIFICATION

## G PHYSICS (NOTES omitted)

### INSTRUMENTS

#### G08 SIGNALLING (indicating or display devices per se [G09F](#); transmission of pictures [H04N](#))

**G08B** **SIGNALLING OR CALLING SYSTEMS; ORDER TELEGRAPHS; ALARM SYSTEMS** {(signalling arrangements on vehicles [B60Q](#), [B62D 41/00](#); railway signalling systems or devices [B61L](#); on cycles [B62J 3/00](#), [B62J 6/00](#); signalling or alarm devices in mines [E21F 17/18](#); lamps or shutters therefor [F21](#); sensitive measuring elements, see the appropriate subclasses of [G01](#); traffic control systems [G08G](#); visual indicating means [G09](#); sound-producing devices [G10](#); radio or near-field calling systems [H04B 5/00](#), [H04B 7/00](#); selecting arrangements [H04Q 5/00](#), [H04Q 9/00](#); loudspeakers, microphones, gramophone pick-ups or like acoustic electromechanical transducers [H04R](#))}

#### NOTES

1. This subclass covers also means for identifying or incapacitating burglars or the like.
2. This subclass does not cover:
  - the mere provision of an audible or visible signalling device on measuring or switching apparatus;
  - alarm systems for indicating that a specific variable has exceeded, or fallen below, a predetermined value, which are covered by the relevant subclasses of class [G01](#) for the measurement of that variable.
  - alarms for specific processes or types of machines or apparatus, which are covered by the relevant subclasses for the processes, machines, or apparatus.
3. In this subclass, the following term is used with the meaning indicated:
  - "systems" may cover also devices peculiar thereto.

<b>1/00</b>	<b>Systems for signalling characterised solely by the form of transmission of the signal</b>	3/1008	. . {Personal calling arrangements or devices, i.e. paging systems (telephonic systems with personal calling arrangements <a href="#">H04M 11/022</a> ; selective calling systems and call receivers <a href="#">H04W 84/00</a> , <a href="#">H04W 84/00</a> , <a href="#">H04W 68/00</a> )}
1/02	. using only mechanical transmission		
1/04	. using hydraulic transmission; using pneumatic transmission		
1/06	. . hydraulic only	3/1016	. . . {using wireless transmission (calling systems using transmission by inductive loop <a href="#">H04B 5/04</a> )}
1/08	. using electric transmission {; transformation of alarm signals to electrical signals from a different medium, e.g. transmission of an electric alarm signal upon detection of an audible alarm signal}	3/1025	. . . . {Paging receivers with audible signalling details}
2001/085	. . {Partner search devices}	3/1033	. . . . . {with voice message alert}
<b>3/00</b>	<b>Audible signalling systems; Audible personal calling systems</b> {(signalling devices actuated by tyre pressure <a href="#">B60C 23/02</a> ; alarm locks <a href="#">E05B 45/00</a> , e.g. with mechanically-operated bells <a href="#">E05B 45/02</a> , electric <a href="#">E05B 45/06</a> ; sound producing devices, e.g. hooter, buzzer, <a href="#">G10K</a> ; telephonic systems provided with personal calling arrangements <a href="#">H04M 11/022</a> )}	3/1041	. . . . . {with alternative alert, e.g. remote or silent alert}
		3/105	. . . . . {with call or message storage means}
		3/1058	. . . . . {Pager holders or housings (casings for electric apparatus <a href="#">H05K 5/00</a> )}
		3/1066	. . . . . {with other provisions not elsewhere provided for, e.g. turn-off protection}
3/02	. using only mechanical transmission	3/1075	. . . . . {Paging racks}
3/06	. using hydraulic transmission; using pneumatic transmission	3/1083	. . . . . {Pager locating systems (locating mobile subscribers in general <a href="#">H04W 64/00</a> )}
3/10	. using electric transmission; using electromagnetic transmission {(intercoms <a href="#">H04M 11/02</a> ; distributing signals to two or more loudspeakers <a href="#">H04R 3/12</a> ; loudspeakers for public address systems <a href="#">H04R 27/00</a> )}	3/1091	. . . . . {Group calling}
		3/14	. using explosives {(explosive signals for railways <a href="#">B61L</a> ; detonating alarm locks <a href="#">E05B 45/04</a> )}

- 5/00 Visible signalling systems, e.g. personal calling systems, remote indication of seats occupied** {(locks with visible signalling devices [E05B 39/00](#); electro-, magneto- or acousto-optic display devices [G02F](#); display tubes [H01J 17/49](#), [H01K 7/04](#); electro-luminescent devices [H05B 33/00](#)}
- 5/002 . {Distress signalling devices, e.g. rescue balloons (vehicle optical signalling for indicating emergencies [B60Q 1/52](#); balloons in general [B64B 1/40](#))}
- 5/004 . {Reflective safety signalling devices attached on persons}
- 5/006 . {Portable traffic signalling devices ([G08B 5/004](#) takes precedence; emergency signalling devices to be placed on roads or vehicles [B60Q 7/00](#))}
- 5/008 . {Traffic signalling mirrors}
- 5/02 . using only mechanical transmission
- 5/06 . using hydraulic transmission; using pneumatic transmission
- 5/14 . . with indicator element moving about a pivot, e.g. hinged flap or rotating vane
- 5/16 . . . with reset means necessitating a separate operation to return the indicator element
- 5/18 . . with indicator element moving rectilinearly
- 5/20 . . . with reset means necessitating a separate operation to return the indicator element
- 5/22 . using electric transmission; using electromagnetic transmission
- 5/221 . . {Local indication of seats occupied in a facility, e.g. in a theatre}
- 5/222 . . {Personal calling arrangements or devices, i.e. paging systems (selective calling systems and call receivers [H04W 84/00](#), [H04W 84/00](#), [H04W 68/00](#))}
- 5/223 . . . {using wireless transmission}
- 5/224 . . . . {Paging receivers with visible signalling details}
- 5/225 . . . . . {Display details}
- 5/226 . . . . . {with alphanumeric or graphic display means}
- 5/227 . . . . . {with call or message storage means}
- 5/228 . . . . . {combined with other devices having a different main function, e.g. watches}
- 5/229 . . . . . {with other provisions not elsewhere provided for}
- 5/24 . . with indicator element moving about a pivot, e.g. hinged flap or rotating vane {(signalling devices for telephones [H04M 19/04](#); telecontrolling indicating devices, e.g. hinged flap, [G08C 19/30](#); signalling systems for auctioneering devices [H04L 12/1804](#))}
- 5/26 . . . with reset means necessitating a separate operation to return the indicator element
- 5/28 . . . with hinged flap or arm
- 5/30 . . . with rotating or oscillating members, e.g. vanes
- 5/32 . . with indicator element moving rectilinearly
- 5/34 . . . with reset means necessitating a separate operation to return the indicator element
- 5/36 . . using visible light sources
- 5/38 . . . using flashing light {(circuit arrangements for flashing lamps [H05B 41/30](#), [H05B 39/09](#); arrangements on vehicles [B60Q 1/34](#), [B60Q 1/46](#))}
- 5/40 . using smoke, fire or coloured gases {(for personal calling arrangements [G08B 3/1008](#), [G08B 3/1016](#); smoke producers for aircraft [B64D 1/16-B64D 1/20](#); chemical compositions [C06B](#); missiles, e.g. of tracer, illuminating, signal or smoke producing type [F42B](#))}
- 6/00 Tactile signalling systems, e.g. personal calling systems** {(apparatus for generating mechanical vibrations [B06B 1/045](#); motors converting reciprocating into rotary movement or vice-versa [H02K 7/06](#); motors with reciprocating, oscillating, or vibrating magnet, armature, or coil system [H02K 33/00](#); telephone hand set vibration alarms [H04M 19/047](#))}
- 7/00 Signalling systems according to more than one of groups [G08B 3/00-G08B 6/00](#); Personal calling systems according to more than one of groups [G08B 3/00-G08B 6/00](#)** {(combinations of display devices with advertising [G09F](#))}
- 7/02 . using mechanical transmission
- 7/04 . using hydraulic transmission; using pneumatic transmission
- 7/06 . using electric transmission {, e.g. involving audible and visible signalling through the use of sound and light sources (walking aids for blind persons [A61H 3/06](#); facilitating escape from buildings [A62B 3/00](#))}
- 7/062 . . {indicating emergency exits (signs, boards or panels illuminated from behind, indicating exit way or orientation [G09F 2013/0459](#))}
- 7/064 . . {indicating houses needing emergency help, e.g. with a flashing light or sound}
- 7/066 . . {guiding along a path, e.g. evacuation path lighting strip}
- 7/068 . . {calling personnel in a restaurant, e.g. waiter call}
- 7/08 . using explosives
- 9/00 Order telegraph apparatus, i.e. means for transmitting one of a finite number of different orders at the discretion of the user, e.g. bridge to engine room orders in ships** {(signaling devices in mines [E21F 17/18](#))}
- 9/02 . Details
- 9/04 . . Means for recording operation of the apparatus
- 9/06 . . Means for indicating disagreement between orders given and those carried out
- 9/08 . mechanical
- 9/10 . . using ratchet {(see provisionally [G08B 9/08](#))}
- 9/12 . . using rotary shaft {(see provisionally [G08B 9/08](#))}
- 9/14 . hydraulic; pneumatic
- 9/16 . . using ratchet {(see provisionally [G08B 9/14](#))}
- 9/18 . . by varying displacement of the fluid {(see provisionally [G08B 9/14](#))}
- 9/20 . . by varying pressure of the fluid {(see provisionally [G08B 9/14](#))}
- 13/00 Burglar, theft or intruder alarms** {(fire or police telegraphic systems [G08B 25/00](#), [G08B 26/00](#), [H04M 11/04](#); vehicle theft alarms [B60R 25/10](#); cycle theft alarms [B62H 5/00](#))}
- 13/02 . Mechanical actuation
- 13/04 . . by breaking of glass

- 13/06 . . by tampering with fastening { (alarm locks [E05B 45/00](#); alarm devices on safes [E05G 1/10](#)) }
- 13/08 . . by opening, e.g. of door, of window, of drawer, of shutter, of curtain, of blind { (alarm locks [E05B 45/00](#); electrical switches operated by opening or closing of a door [H01H 13/18](#)) }
- 13/10 . . by pressure on floors, floor coverings, stair treads, counters, or tills { (contact cables, contact carpets [H01B 7/10](#); electrical switches operated by change of a non-electrical or thermal condition [H01H 9/00](#); treadles for traffic control [G08G 1/02](#)) }
- 13/12 . . by the breaking or disturbance of stretched cords or wires
- 13/122 . . . {for a perimeter fence (features peculiar to electrified fences [A01K 3/00](#); fences per se [E04H 17/00](#)) }
- 13/124 . . . . {with the breaking or disturbance being optically detected, e.g. optical fibers in the perimeter fence }
- 13/126 . . . {for a housing, e.g. a box, a safe, a room (anti-theft means in containers [B65D 2211/00](#)) }
- 13/128 . . . . {the housing being an electronic circuit unit, e.g. memory or CPU chip (protecting computer components in secure or tamper resistant housings [G06F 21/86](#); protecting computer input devices, e.g. keyboards [G06F 21/83](#)) }
- 13/14 . . by lifting or attempted removal of hand-portable articles {(devices to prevent theft or loss of purses, luggage or hand carried bags [A45C 13/18](#)) }
- 13/1409 . . . {for removal detection of electrical appliances by detecting their physical disconnection from an electrical system, e.g. using a switch incorporated in the plug connector }
- 13/1418 . . . . {Removal detected by failure in electrical connection between the appliance and a control centre, home control panel or a power supply }
- 13/1427 . . . {with transmitter-receiver for distance detection }
- NOTE**
- Details thereof are further classified in the subgroups of [G08B 21/0202](#)
- 13/1436 . . . {with motion detection }
- 13/1445 . . . {with detection of interference with a cable tethering an article, e.g. alarm activated by detecting detachment of article, breaking or stretching of cable (furniture, e.g. shelves for displaying merchandise, incorporating tethers to prevent theft [A47F 7/024](#), [A47F 5/0861](#)) }
- 13/1454 . . . . {Circuit arrangements thereof }
- 13/1463 . . . . {Physical arrangements, e.g. housings (devices to prevent theft or loss of purses, luggage or hand carried bags [A45C 13/18](#)) }
- 13/1472 . . . {with force or weight detection }
- 13/1481 . . . {with optical detection }
- 13/149 . . . {with electric, magnetic, capacitive switch actuation }
- 13/16 . Actuation by interference with mechanical vibrations in air or other fluid
- 13/1609 . . {using active vibration detection systems (active detection systems per se [G01S](#)) }
- 13/1618 . . . {using ultrasonic detection means }
- 13/1627 . . . . {using Doppler shift detection circuits }
- 13/1636 . . . . {using pulse-type detection circuits }
- 13/1645 . . . {using ultrasonic detection means and other detection means, e.g. microwave or infra-red radiation }
- 13/1654 . . {using passive vibration detection systems }
- 13/1663 . . . {using seismic sensing means }
- 13/1672 . . . {using sonic detecting means, e.g. a microphone operating in the audio frequency range }
- 13/1681 . . . {using infrasonic detecting means, e.g. a microphone operating below the audible frequency range }
- 13/169 . . . {using cable transducer means }
- 13/18 . Actuation by interference with heat, light or radiation of shorter wavelength; Actuation by intruding sources of heat, light or radiation of shorter wavelength {(signalling devices using photo-electric devices in general [G09F](#)) }
- 13/181 . . using active radiation detection systems
- 13/183 . . . by interruption of a radiation beam or barrier {(industrial safety devices with photocells [F16P 3/14](#)) }
- 13/184 . . . . using radiation reflectors
- 13/186 . . . . using light guides, e.g. optical fibres
- 13/187 . . . by interference of a radiation field
- 13/189 . . using passive radiation detection systems
- 13/1895 . . . {using light change detection systems ([G08B 13/194](#) takes precedence) }
- 13/19 . . . using infra-red radiation detection systems {([G08B 13/194](#) takes precedence; lighting devices activated by motion detection [F21V 23/0442](#); radiation pyrometry per se [G01J 5/00](#); controlling circuits for electric light sources activated by motion detection [H05B 37/0227](#)) }
- 13/191 . . . . using pyroelectric sensor means
- 13/193 . . . . using focusing means
- 13/194 . . . using image scanning and comparing systems
- 13/196 . . . . using television cameras {(recognition of scenes under surveillance [G06K 9/00771](#); image analysis per se [G06T 7/00](#); television cameras [H04N 5/225](#); CCTV systems [H04N 7/18](#)) }
- 13/19602 . . . . . {Image analysis to detect motion of the intruder, e.g. by frame subtraction }
- 13/19604 . . . . . {involving reference image or background adaptation with time to compensate for changing conditions, e.g. reference image update on detection of light level change }
- 13/19606 . . . . . {Discriminating between target movement or movement in an area of interest and other non-significative movements, e.g. target movements induced by camera shake or movements of pets, falling leaves, rotating fan }

- 13/19608 . . . . . {Tracking movement of a target, e.g. by detecting an object predefined as a target, using target direction and or velocity to predict its new position ([analysis of motion by image processing per se G06T 7/20](#))}
- 13/1961 . . . . . {Movement detection not involving frame subtraction, e.g. motion detection on the basis of luminance changes in the image}
- 13/19613 . . . . . {Recognition of a predetermined image pattern or behaviour pattern indicating theft or intrusion}
- 13/19615 . . . . . {wherein said pattern is defined by the user}
- 13/19617 . . . . . {Surveillance camera constructional details}
- 13/19619 . . . . . {Details of casing}
- 13/19621 . . . . . {Portable camera}
- 13/19623 . . . . . {Arrangements allowing camera linear motion, e.g. camera moving along a rail cable or track}
- 13/19626 . . . . . {optical details, e.g. lenses, mirrors, multiple lenses ([G08B 13/19628 takes precedence](#))}
- 13/19628 . . . . . {of wide angled cameras and camera groups, e.g. omni-directional cameras, fish eye, single units having multiple cameras achieving a wide angle view}
- 13/1963 . . . . . {Arrangements allowing camera rotation to change view, e.g. pivoting camera, pan-tilt and zoom [PTZ]}
- 13/19632 . . . . . {Camera support structures, e.g. attachment means, poles}
- 13/19634 . . . . . {Electrical details of the system, e.g. component blocks for carrying out specific functions}
- 13/19636 . . . . . {pertaining to the camera}
- 13/19639 . . . . . {Details of the system layout}
- 13/19641 . . . . . {Multiple cameras having overlapping views on a single scene}
- 13/19643 . . . . . {wherein the cameras play different roles, e.g. different resolution, different camera type, master-slave camera}
- 13/19645 . . . . . {Multiple cameras, each having view on one of a plurality of scenes, e.g. multiple cameras for multi-room surveillance or for tracking an object by view hand-over}
- 13/19647 . . . . . {Systems specially adapted for intrusion detection in or around a vehicle}
- 13/1965 . . . . . {the vehicle being an aircraft}
- 13/19652 . . . . . {Systems using zones in a single scene defined for different treatment, e.g. outer zone gives pre-alarm, inner zone gives alarm}
- 13/19654 . . . . . {Details concerning communication with a camera}
- 13/19656 . . . . . {Network used to communicate with a camera, e.g. WAN, LAN, Internet}
- 13/19658 . . . . . {Telephone systems used to communicate with a camera, e.g. PSTN, GSM, POTS}
- 13/1966 . . . . . {Wireless systems, other than telephone systems, used to communicate with a camera}
- 13/19663 . . . . . {Surveillance related processing done local to the camera}
- 13/19665 . . . . . {Details related to the storage of video surveillance data ([television signal recording H04N 5/76](#))}
- 13/19667 . . . . . {Details related to data compression, encryption or encoding, e.g. resolution modes for reducing data volume to lower transmission bandwidth or memory requirements}
- 13/19669 . . . . . {Event triggers storage or change of storage policy}
- 13/19671 . . . . . {Addition of non-video data, i.e. metadata, to video stream}
- 13/19673 . . . . . {Addition of time stamp, i.e. time metadata, to video stream}
- 13/19676 . . . . . {Temporary storage, e.g. cyclic memory, buffer storage on pre-alarm}
- 13/19678 . . . . . {User interface}
- 13/1968 . . . . . {Interfaces for setting up or customising the system}
- 13/19682 . . . . . {Graphic User Interface [GUI] presenting system data to the user, e.g. information on a screen helping a user interacting with an alarm system}
- 13/19684 . . . . . {Portable terminal, e.g. mobile phone, used for viewing video remotely}
- 13/19686 . . . . . {Interfaces masking personal details for privacy, e.g. blurring faces, vehicle license plates}
- 13/19689 . . . . . {Remote control of cameras, e.g. remote orientation or image zooming control for a PTZ camera}
- 13/19691 . . . . . {Signalling events for better perception by user, e.g. indicating alarms by making display brighter, adding text, creating a sound}
- 13/19693 . . . . . {using multiple video sources viewed on a single or compound screen}
- 13/19695 . . . . . {Arrangements wherein non-video detectors start video recording or forwarding but do not generate an alarm themselves}
- 13/19697 . . . . . {Arrangements wherein non-video detectors generate an alarm themselves}
- 13/20 . . . . . Actuation by change of fluid pressure
- 13/22 . . . . . Electrical actuation ([G08B 13/2494 takes precedence](#))
- 13/24 . . . . . by interference with electromagnetic field distribution ([signals actuated by trains B61L](#); [metal detectors using induction coils G01V 3/10](#); [metal detectors combined with record carrier readers G06K 7/085](#))

- 13/2402 . . . {Electronic Article Surveillance [EAS], i.e. systems using tags for detecting removal of a tagged item from a secure area, e.g. tags for detecting shoplifting (mechanical aspects of the tags, e.g. related to locking [E05B 73/0017](#); RFID readers [G06K 7/00](#); RFID tags [G06K 19/00](#); access control systems [G07C 9/00](#); anti-theft control in point of sale systems [G07G 3/003](#); security seals [G09F 3/03](#)}
- 13/2405 . . . . {characterised by the tag technology used}
- 13/2408 . . . . . {using ferromagnetic tags}
- 13/2411 . . . . . {Tag deactivation}
- 13/2414 . . . . . {using inductive tags}
- 13/2417 . . . . . {having a radio frequency identification chip (radio frequency identification tags *per se* [G06K 19/00](#); inventory or logistics in general [G06Q 10/00](#))}
- 13/242 . . . . . {Tag deactivation}
- 13/2422 . . . . . {using acoustic or microwave tags}
- 13/2425 . . . . . {Tag deactivation}
- 13/2428 . . . . . {Tag details}
- 13/2431 . . . . . {Tag circuit details}
- 13/2434 . . . . . {Tag housing and attachment details (transponders in containers [B65D 2203/10](#); anti-theft means in containers [B65D 2211/00](#))}
- 13/2437 . . . . . {Tag layered structure, processes for making layered tags}
- 13/244 . . . . . {Tag manufacturing, e.g. continuous manufacturing processes}
- 13/2442 . . . . . {Tag materials and material properties thereof, e.g. magnetic material details}
- 13/2445 . . . . . {Tag integrated into item to be protected, e.g. source tagging (anti-theft means in containers [B65D 2211/00](#))}
- 13/2448 . . . . . {Tag with at least dual detection means, e.g. combined inductive and ferromagnetic tags, dual frequencies within a single technology, tampering detection or signalling means on the tag}
- 13/2451 . . . . . {Specific applications combined with EAS}
- 13/2454 . . . . . {Checking of authorisation of a person accessing tagged items in an EAS system}
- 13/2457 . . . . . {Lending systems using EAS tags wherein the tags are reusable, e.g. they can be activated and deactivated more than once, e.g. for a library}
- 13/246 . . . . . {Check out systems combined with EAS, e.g. price information stored on EAS tag (anti-theft systems in point of sale systems [G07G 3/003](#))}
- 13/2462 . . . . . {Asset location systems combined with EAS (inventory, tracking, logistic [G06Q 10/00](#); entrance control systems [G07C 9/00](#))}
- 13/2465 . . . . . {Aspects related to the EAS system, e.g. system components other than tags}
- 13/2468 . . . . . {Antenna in system and the related signal processing}
- 13/2471 . . . . . {Antenna signal processing by receiver or emitter}
- 13/2474 . . . . . {Antenna or antenna activator geometry, arrangement or layout (loop antennae [H01Q 1/22](#))}
- 13/2477 . . . . . {Antenna or antenna activator circuit}
- 13/248 . . . . . {EAS system combined with another detection technology, e.g. dual EAS and video or other presence detection system}
- 13/2482 . . . . . {EAS methods, e.g. description of flow chart of the detection procedure}
- 13/2485 . . . . . {Simultaneous detection of multiple EAS tags}
- 13/2488 . . . . . {Timing issues, e.g. synchronising measures to avoid signal collision, with multiple emitters or a single emitter and receiver}
- 13/2491 . . . {Intrusion detection systems, i.e. where the body of an intruder causes the interference with the electromagnetic field}
- 13/2494 . . . . {by interference with electro-magnetic field distribution combined with other electrical sensor means, e.g. microwave detectors combined with other sensor means}
- 13/2497 . . . . . {using transmission lines, e.g. cable}
- 13/26 . . . by proximity of an intruder causing variation in capacitance or inductance of a circuit
- 15/00 Identifying, scaring or incapacitating burglars, thieves or intruders, e.g. by explosives** {(devices to prevent loss of bags, trunks or travelling baskets by producing sound, piercing, gas-discharging or the like [A45C 13/24](#); alarm locks [E05B 45/00](#), e.g. with detonating alarm [E05B 45/04](#))}
- 15/001 . {Concealed systems, e.g. disguised alarm systems to make covert systems}
- 15/002 . {with occupancy simulation}
- 15/004 . {using portable personal devices (hand-held or body-worn self-defence devices using repellent gases or chemicals [F41H 9/10](#))}
- 15/005 . {by electric shock}
- 15/007 . {by trapping}
- 15/008 . {by simulating the existence of a security system, e.g. a mock video camera to scare thieves}
- 15/02 . with smoke, gas, or coloured or odorous powder or liquid
- 17/00 Fire alarms; Alarms responsive to explosion** {(automatic fire-extinguishing and alarm devices [A62C 35/00](#), [A62C 37/00](#); structural combination of lighting devices with smoke detectors [F21V 33/0076](#); arrangement of safety devices on stoves [F24C 7/08](#))}
- 17/005 . {for forest fires, e.g. detecting fires spread over a large or outdoors area (fire fighting forest fires [A62C 3/02](#))}
- 17/02 . Mechanical actuation of the alarm, e.g. by the breaking of a wire
- 17/04 . Hydraulic or pneumatic actuation of the alarm, e.g. by change of fluid pressure
- 17/06 . Electric actuation of the alarm, e.g. using a thermally-operated switch {(thermally-operated electric switches *per se* [H01H 37/00](#))}
- 17/08 . Actuation involving the use of explosive means
- 17/10 . Actuation by presence of smoke or gases {automatic alarm devices for analysing flowing fluid materials by the use of optical means (turbidimetric analysis of gases, e.g. of smoke [G01N 21/534](#))}
- 17/103 . . using a light-emitting and receiving device
- 17/107 . . . for detecting light-scattering due to smoke

17/11	. . using an ionisation chamber for detecting smoke or gas {(gas analysis by investigating the ionisation <a href="#">G01N 27/62</a> )}	21/025	. . . . {System arrangements wherein the alarm criteria uses absence of reply signal after an elapsed time}
17/113	. . . . Constructional details	21/0252	. . . . {System arrangements wherein the child unit emits, i.e. the child unit incorporates the emitter}
17/117	. . by using a detection device for specific gases, e.g. combustion products, produced by the fire ( <a href="#">G08B 17/103</a> , <a href="#">G08B 17/11</a> take precedence ; investigating or analysing gases in general <a href="#">G01N</a> , e.g. by using electric means <a href="#">G01N 27/00</a> ; particle spectrometers per se <a href="#">H01J 49/00</a> )	21/0255	. . . . {System arrangements wherein the parent unit emits, i.e. the parent unit incorporates the emitter}
17/12	. Actuation by presence of radiation or particles, e.g. of infra-red radiation or of ions {(flame detection in burners <a href="#">F23N 5/00</a> ; alarm or controlling circuits using ionisation chamber, proportional counters or Geiger-Müller tubes also functioning as u-v detectors <a href="#">G01T 7/125</a> )}	21/0258	. . . . {System arrangements wherein both parent and child units can emit and receive}
17/125	. . {by using a video camera to detect fire or smoke}	21/0261	. . . {System arrangements wherein the object is to detect trespassing over a fixed physical boundary, e.g. the end of a garden}
<b>19/00</b>	<b>Alarms responsive to two or more different undesired or abnormal conditions, e.g. burglary and fire, abnormal temperature and abnormal rate of flow</b>	21/0263	. . . {System arrangements wherein the object is to detect the direction in which child or item is located}
19/005	. {combined burglary and fire alarm systems}	21/0266	. . . {System arrangements wherein the object is to detect the exact distance between parent and child or surveyor and item}
19/02	. Alarm responsive to formation or anticipated formation of ice {(indicating weather conditions <a href="#">G01W 1/00</a> )}	21/0269	. . . {System arrangements wherein the object is to detect the exact location of child or item using a navigation satellite system, e.g. GPS}
<b>21/00</b>	<b>Alarms responsive to a single specified undesired or abnormal operating condition and not elsewhere provided for {(alarms on gas pipes <a href="#">F17D 3/01</a>)}</b>	21/0272	. . . {System arrangements wherein the object is to detect exact location of child or item using triangulation other than GPS}
21/02	. Alarms for ensuring the safety of persons	21/0275	. . . {Electronic Article Surveillance [EAS] tag technology used for parent or child unit, e.g. same transmission technology, magnetic tag, RF tag, RFID}
21/0202	. . {Child monitoring systems using a transmitter-receiver system carried by the parent and the child}	21/0277	. . . {Communication between units on a local network, e.g. Bluetooth, piconet, zigbee, Wireless Personal Area Networks [WPAN]}
21/0205	. . . {Specific application combined with child monitoring using a transmitter-receiver system}	21/028	. . . {Communication between parent and child units via remote transmission means, e.g. satellite network}
21/0208	. . . . {Combination with audio or video communication, e.g. combination with "baby phone" function}	21/0283	. . . . {via a telephone network, e.g. cellular GSM}
21/0211	. . . . {Combination with medical sensor, e.g. for measuring heart rate, temperature}	21/0286	. . . {Tampering or removal detection of the child unit from child or article}
21/0213	. . . . {System disabling if a separation threshold is exceeded (disabling electrical appliances in case of unplugging <a href="#">G08B 13/1409</a> )}	21/0288	. . . {Attachment of child unit to child/article}
21/0216	. . . {Alarm cancellation after generation}	21/0291	. . . {Housing and user interface of child unit}
21/0219	. . . {Circuit arrangements}	21/0294	. . . {Display details on parent unit}
21/0222	. . . {Message structure or message content, e.g. message protocol}	21/0297	. . {Robbery alarms, e.g. hold-up alarms, bag snatching alarms}
21/0225	. . . {Monitoring making use of different thresholds, e.g. for different alarm levels}	21/04	. . responsive to non-activity, e.g. of elderly persons ( <a href="#">G08B 21/06</a> takes precedence)
21/0227	. . . {System arrangements with a plurality of child units}	21/0407	. . . {based on behaviour analysis}
21/023	. . . {Power management, e.g. system sleep and wake up provisions}	21/0415	. . . . {detecting absence of activity per se}
21/0233	. . . {System arrangements with pre-alarms, e.g. when a first distance is exceeded}	21/0423	. . . . {detecting deviation from an expected pattern of behaviour or schedule}
21/0236	. . . {Threshold setting}	21/043	. . . . {detecting an emergency event, e.g. a fall}
21/0238	. . . {adding new units to the system}	21/0438	. . . {Sensor means for detecting}
21/0241	. . . {Data exchange details, e.g. data protocol}	21/0446	. . . . {worn on the body to detect changes of posture, e.g. a fall, inclination, acceleration, gait}
21/0244	. . . . {System arrangements wherein the alarm criteria uses signal delay or phase shift}	21/0453	. . . . {worn on the body to detect health condition by physiological monitoring, e.g. electrocardiogram, temperature, breathing (detecting, measuring or recording for diagnostic purposes <a href="#">A61B 5/00</a> )}
21/0247	. . . . {System arrangements wherein the alarm criteria uses signal strength}	21/0461	. . . . {integrated or attached to an item closely associated with the person but not worn by the person, e.g. chair, walking stick, bed sensor}

21/0469	. . . . {Presence detectors to detect unsafe condition, e.g. infrared sensor, microphone ( <a href="#">G08B 21/0476 takes precedence</a> )}	25/004	. {Alarm propagated along alternative communication path or using alternative communication medium according to a hierarchy of available ways to communicate, e.g. if Wi-Fi not available use GSM}
21/0476	. . . . {Cameras to detect unsafe condition, e.g. video cameras}	25/005	. {Alarm destination chosen according to a hierarchy of available destinations, e.g. if hospital does not answer send to police station}
21/0484	. . . . {Arrangements monitoring consumption of a utility or use of an appliance which consumes a utility to detect unsafe condition, e.g. metering of water, gas or electricity, use of taps, toilet flush, gas stove or electric kettle}	25/006	. {Alarm destination chosen according to type of event, e.g. in case of fire phone the fire service, in case of medical emergency phone the ambulance}
21/0492	. . . . {Sensor dual technology, i.e. two or more technologies collaborate to extract unsafe condition, e.g. video tracking and RFID tracking}	25/007	. {Details of data content structure of message packets; data protocols}
21/06	. . indicating a condition of sleep, e.g. anti-dozing alarms {(psychotechnic analysis of vehicle drivers <a href="#">A61B 5/18</a> ; safety devices for propulsion-unit control of vehicles responsive to incapacity of driver <a href="#">B60K 28/06</a> )}	25/008	. {Alarm setting and unsetting, i.e. arming or disarming of the security system}
21/08	. . responsive to the presence of persons in a body of water, e.g. a swimming pool; responsive to an abnormal condition of a body of water	25/009	. {Signalling of the alarm condition to a substation whose identity is signalled to a central station, e.g. relaying alarm signals in order to extend communication range}
21/082	. . . {by monitoring electrical characteristics of the water}	25/01	. characterised by the transmission medium
21/084	. . . {by monitoring physical movement characteristics of the water}	25/012	. . {using recorded signals, e.g. speech ( <a href="#">G08B 25/08 takes precedence</a> )}
21/086	. . . {by monitoring a perimeter outside the body of the water}	25/014	. . {Alarm signalling to a central station with two-way communication, e.g. with signalling back}
21/088	. . . {by monitoring a device worn by the person, e.g. a bracelet attached to the swimmer}	25/016	. . {Personal emergency signalling and security systems (emergency non-personal manually actuated alarm activators <a href="#">G08B 25/12</a> )}
21/10	. . responsive to calamitous events, e.g. tornados or earthquakes	25/018	. . {Sensor coding by detecting magnitude of an electrical parameter, e.g. resistance}
21/12	. . responsive to undesired emission of substances, e.g. pollution alarms	25/04	. . using a single signalling line, e.g. in a closed loop
21/14	. . . Toxic gas alarms ( <a href="#">G08B 21/16 takes precedence</a> )	25/045	. . . {with sensing devices and central station in a closed loop, e.g. McCullough loop}
21/16	. . . Combustible gas alarms	25/06	. . using power transmission lines {(systems in general for transmission of information via power distribution lines <a href="#">H04B 3/54</a> )}
21/18	. Status alarms ( <a href="#">G08B 21/02 takes precedence</a> )	25/08	. . using communication transmission lines {( <a href="#">G08B 13/19658</a> , <a href="#">G08B 21/0286</a> , <a href="#">G08B 25/016 take precedence</a> ; specific aspects of telephone communication systems adapted for combination with alarm systems <a href="#">H04M 11/04</a> )}
21/182	. . {Level alarms, e.g. alarms responsive to variables exceeding a threshold}	25/085	. . . {using central distribution transmission lines}
21/185	. . {Electrical failure alarms}	25/10	. . using wireless transmission systems {( <a href="#">G08B 25/009 takes precedence</a> )}
21/187	. . {Machine fault alarms}	25/12	. Manually actuated calamity alarm transmitting arrangements {emergency non-personal manually actuated alarm, activators, e.g. details of alarm push buttons mounted on an infrastructure}
21/20	. . responsive to moisture	25/14	. Central alarm receiver or annunciator arrangements
21/22	. . responsive to presence or absence of persons	<b>26/00</b>	<b>Alarm systems in which substations are interrogated in succession by a central station</b>
21/24	. . Reminder alarms, e.g. anti-loss alarms	26/001	. {with individual interrogation of substations connected in parallel}
21/245	. . . {Reminder of hygiene compliance policies, e.g. of washing hands}	26/002	. . {only replying the state of the sensor}
<b>23/00</b>	<b>Alarms responsive to unspecified undesired or abnormal conditions</b>	26/003	. . {replying the identity and the state of the sensor}
<b>25/00</b>	<b>Alarm systems in which the location of the alarm condition is signalled to a central station, e.g. fire or police telegraphic systems {(signalling systems in general <a href="#">G08C</a>)}</b>	26/004	. {with common interrogation of substations}
25/001	. {Alarm cancelling procedures or alarm forwarding decisions, e.g. based on absence of alarm confirmation}	26/005	. {with substations connected in series, e.g. cascade}
25/002	. {Generating a prealarm to the central station}	26/006	. {with substations connected to an individual line, e.g. star configuration}
25/003	. {Address allocation methods and details}	26/007	. {Wireless interrogation}
		26/008	. {central annunciator means of the sensed conditions, e.g. displaying or registering}

- 27/00 Alarm systems in which the alarm condition is signalled from a central station to a plurality of substations** [{\(signalling systems in general G08C\)}](#)
- 27/001 . {Signalling to an emergency team, e.g. firemen}
  - 27/003 . {Signalling to neighbouring houses}
  - 27/005 . {with transmission via computer network}
  - 27/006 . {with transmission via telephone network}
  - 27/008 . {with transmission via TV or radio broadcast}
- 29/00 Checking or monitoring of signalling or alarm systems; Prevention or correction of operating errors, e.g. preventing unauthorised operation** [{\(arrangements for testing electric properties, arrangements for locating electric faults G01R 31/00\)}](#)
- 29/02 . Monitoring continuously signalling or alarm systems
  - 29/04 . . Monitoring of the detection circuits
  - 29/043 . . . {of fire detection circuits}
  - 29/046 . . . {prevention of tampering with detection circuits}
  - 29/06 . . Monitoring of the line circuits, e.g. signalling of line faults [{\(testing or locating faults in cables or lines in general G01R 31/02, G01R 31/08\)}](#)
  - 29/08 . . . Signalling of tampering with the line circuit
  - 29/10 . . Monitoring of the annunciator circuits
  - 29/12 . Checking intermittently signalling or alarm systems
  - 29/123 . . [{of line circuits \(testing or locating faults in cables or lines in general G01R 31/021, G01R 31/024, G01R 31/08\)}](#)
  - 29/126 . . [{of annunciator circuits}](#)
  - 29/14 . . checking the detection circuits
  - 29/145 . . . [{of fire detection circuits}](#)
  - 29/16 . Security signalling or alarm systems, e.g. redundant systems
  - 29/18 . Prevention or correction of operating errors [\(G08B 29/02, G08B 29/12 take precedence\)](#)
  - 29/181 . . [{due to failing power supply}](#)
  - 29/183 . . [{Single detectors using dual technologies \(G08B 13/1672, G08B 13/2448, G08B 13/2494 take precedence\)}](#)
  - 29/185 . . [{Signal analysis techniques for reducing or preventing false alarms or for enhancing the reliability of the system}](#)
  - 29/186 . . . [{Fuzzy logic; neural networks}](#)
  - 29/188 . . . [{Data fusion; cooperative systems, e.g. voting among different detectors}](#)
  - 29/20 . . Calibration, including self-calibrating arrangements
  - 29/22 . . . Provisions facilitating manual calibration, e.g. input or output provisions for testing; Holding of intermittent values to permit measurement
  - 29/24 . . . Self-calibration, e.g. compensating for environmental drift or ageing of components
  - 29/26 . . . . by updating and storing reference thresholds
  - 29/28 . . . . by changing the gain of an amplifier
- 31/00 Predictive alarm systems characterised by extrapolation or other computation using updated historic data**