CPC COOPERATIVE PATENT CLASSIFICATION

PERFORMING OPERATIONS; TRANSPORTING В (NOTES omitted)

TRANSPORTING

B66 HOISTING; LIFTING; HAULING

B66B ELEVATORS; ESCALATORS OR MOVING WALKWAYS ({apparatus for raising or lowering persons on theatrical stages or the like A63J 5/12}; funicular railbound systems with rigid ground-supported tracks and cable traction, e.g. cliff railways, <u>B61B 9/00</u>; arrangements of ammunition handlers in vessels <u>B63G 3/00</u>; hoists, lifts, or conveyors for loading or unloading in general B65G; braking or detent devices controlling normal movements of winding drums or barrels <u>B66D</u>; ship-lifting devices <u>E02C</u>; garages for many vehicles with mechanical means for lifting vehicles E04H 6/12; hoists for feeding ammunition or projectiles to launching apparatus or to loading mechanisms F41A 9/00)

NOTE

In this subclass, the following term is used with the meaning indicated:

"elevator" covers the term "lift", and the two terms are interchangeable

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Common features of elevators		1/2408	{where the allocation of a call to an elevator car
1/00	Control systems of elevators in general (safety devices <u>B66B 5/00</u> ; controlling door or gate operation	1/2416	is of importance, i.e. by means of a supervisory or group controller} {For single car elevator systems}
1/02	 <u>B66B 13/00</u>; systems of general application <u>G05</u>) Control systems without regulation, i.e. without retroactive action 	1/2433	• • • {For elevator systems with a single shaft and multiple cars}
1/04	hydraulic	1/2458	 . • {For elevator systems with multiple shafts and a single car per shaft}
1/06 1/08	 electric with devices, e.g. handles or levers, in the cars or cages for direct control of movements 	1/2466	• • • {For elevator systems with multiple shafts and multiple cars per shaft}
1/10	specially adapted for mining hoists	1/2491	• • • {For elevator systems with lateral transfers of cars or cabins between hoistways}
1/12	 with devices, e.g. handles or levers, located at a control station for direct control movements, e.g. electric mining-hoist control systems 	1/26 1/28	 mechanical electrical (detecting excessive speed <u>B66B 5/04</u> {;
1/14	with devices, e.g. push-buttons, for indirect control of movements	1/285 1/30	 control of electrical motor <u>H02P</u>}) . • {with the use of a speed pattern generator} . • effective on driving gear {, e.g. acting on
1/16	• • • • with means for storing pulses controlling the movements of a single car or cage {(B66B 1/2433 takes precedence)}	1/30	power electronics, on inverter or rectifier controlled motor}
1/18	• • • • with means for storing pulses controlling the movements of several cars or cages {(B66B 1/2458 takes precedence)}	1/302 1/304 1/306	 {for energy saving} {with starting torque control} {with DC powered elevator drive}
1/20	and for varying the manner of operation to suit particular traffic conditions, e.g. "one-way rush-hour traffic" {(B66B 1/2466 takes precedence)}	1/308 1/32	 . • {with AC powered elevator drive} • • effective on braking devices {, e.g. acting on electrically controlled brakes (brake control H02P, lift brakes per se B66B 5/02)}
1/22	with means for taking account of delayed calls	1/34	• Details {, e.g. call counting devices, data transmission from car to control system, devices
1/24	 Control systems with regulation, i.e. with retroactive action, for influencing travelling speed, acceleration, or deceleration 	1/3407	giving information to the control system}• {Setting or modification of parameters of the control system}

Common features of elevators B66B

1/3415	{Control system configuration and the data transmission or communication within the control	3/026	{Mechanical devices that can be illuminated}
1/3423	system} {Control system configuration, i.e. lay-out}	5/00	Applications of checking, fault-correcting, or safety devices in elevators
1/3423	{Fault-tolerant or redundant control system configuration}	5/0006	• {Monitoring devices or performance analysers (<u>B66B 5/02</u> takes precedence)}
1/3438	• • • {Master-slave control system configuration}	5/0012	• • {Devices monitoring the users of the elevator
1/3446	• • {Data transmission or communication within the control system}	5/0018	system} . • {Devices monitoring the operating condition of
1/3453	• • • {Procedure or protocol for the data	5/0025	the elevator system} {for maintenance or repair}
1/2461	transmission or communication}	5/0031	{for safety reasons}
1/3461	• • • { between the elevator control system and remote or mobile stations }	5/0037	• • {Performance analysers}
1/3469	{mechanical}	5/0043	• {Devices enhancing safety during maintenance}
1/3476	• • {Load weighing or car passenger counting	5/005	• • {Safety of maintenance personnel}
	devices (<u>B66B 5/14</u> takes precedence)}	5/0056 5/0062	 {by preventing crushing} {by devices, being operable or not, mounted
1/3484	{using load cells}	3/0002	on the elevator car
1/3492	• • {Position or motion detectors or driving means for the detector (<u>B66B 1/40</u> , <u>B66B 1/50</u> take precedence; length measuring <u>G01B</u> ; speed measuring <u>G01P</u>)}	5/0068	• • • {by activating the safety brakes when the elevator car exceeds a certain upper or lower position in the elevator shaft}
1/36	Means for stopping the cars, cages, or skips at predetermined levels	5/0075	 { by anchoring the elevator car or counterweight}
1/365	{mechanical}	5/0081	• • • {by preventing falling by means of safety
1/38	• • • and for returning the controlling handle or lever to its neutral position	- 1000 -	fences or handrails, being operable or not, mounted on top of the elevator car}
1/40	and for correct levelling at landings	5/0087	 {Devices facilitating maintenance, repair or inspection tasks (devices incorporated in the
1/405	• • • {for hydraulically actuated elevators}		buffer <u>B66B 5/288</u> ; railings on top of the car
1/42 1/425	 separate from the main drive {adapted for multi-deck cars in a single car		<u>B66B 11/0226</u>)}
1/423	frame }	5/0093	{Testing of safety devices}
1/44	and for taking account of disturbance factors, e.g. variation of load weight	5/02 5/021	 responsive to abnormal operating conditions • {the abnormal operating conditions being
1/46	• Adaptations of switches or switchgear (switches		independent of the system (alarm systems in general G08B)}
	or switchgear in general, applications of switches or switchgear for floor-levelling purpose <u>H01H</u> ; panels for boards or switching arrangements	5/022	• • {where the abnormal operating condition is caused by a natural event, e.g. earthquake}
	<u>H02B 1/015</u>)	5/024	• • • {where the abnormal operating condition is caused by an accident, e.g. fire}
1/461	{characterised by their shape or profile}	5/025	• • • { where the abnormal operating condition is
1/462 1/463	 {Mechanical or piezoelectric input devices} {Touch sensitive input devices}		caused by human behaviour or misbehaviour,
1/465	 { Fouch sensitive input devices } { being resistant to damage }		e.g. forcing the doors}
1/466	• • • • (facilitating maintenance, installation, removal, replacement or repair)	5/027	 { to permit passengers to leave an elevator car in case of failure, e.g. moving the car to a reference floor or unlocking the door}
1/467	• • {characterised by their mounting position}	5/028	Safety devices separate from control system
1/468	• • {Call registering systems}		in case of power failure, for hydraulical lifts,
1/48	witches (for cranes <u>B66C 13/50</u> ; for winding		e.g. braking the hydraulic jack ($\underline{B66B 5/16}$ takes precedence)}
1/50	mechanisms <u>B66D 1/56</u>) with operating or control mechanisms mounted	5/04	for detecting excessive speed
	in the car or cage or in the lift well or hoistway	5/042	• • • {characterised by specific locations of the governor cable}
1/52	Floor selectors	5/044	• • • {Mechanical overspeed governors}
3/00	Applications of devices for indicating or signalling operating conditions of elevators	5/046 5/048	 { of the pendulum or rocker arm type} {Testing of overspeed governor}
3/002	. {Indicators}	5/06	electrical
3/004	• • {Mechanical devices that can be illuminated}	5/08	• for preventing overwinding
3/006	• • {for guiding passengers to their assigned elevator	5/10 5/12	in case of rape or cable sleek
3/008	car} {Displaying information not related to the	5/12 5/125	in case of rope or cable slack{electrical}
3/008	elevator, e.g. weather, publicity, internet or TV	5/125	in case of excessive loads
3/02	Position or depth indicators	5/145	• • {electrical}
3/02	·		• • • ()

Common features of elevators B66B

5/16	Braking or catch devices operating between	7/1269	• • · {specially adapted for guides}
	cars, cages, or skips and fixed guide elements or	7/1276	• • {Cleaning means}
7 /10	surfaces in hoistway or well	7/1284	• • { specially adapted for ropes or cables }
5/18	and applying frictional retarding forces	7/1292	• • {specially adapted for guides}
5/185	• • • • {by acting on main ropes or main cables}	T *0.	
5/20	by means of rotatable eccentrically-mounted members (<u>B66B 5/24</u> takes precedence)		Sociated with, buildings Winds on types of lifts in an associated with
5/22	by means of linearly-movable wedges (B66B 5/24 takes precedence)	9/00	Kinds or types of lifts in, or associated with, buildings or other structures (characterised by
5/24	by acting on guide ropes or cables		control systems <u>B66B 1/00</u> ; apparatus for raising or
5/26	• • Positively-acting devices, e.g. latches, knives	0.1002	lowering persons on stages of theatres A63J 5/12)
5/28	Buffer-stops for cars, cages, or skips	9/003	• {for lateral transfer of car or frame, e.g. between
5/282	• • {Structure thereof}	2000/006	vertical hoistways or to/from a parking position}
5/284	• • {mounted on cars or counterweights}	2009/006	• {Ganged elevator}
5/286	• • {between two cars or two counterweights}	9/02	actuated mechanically otherwise than by rope or
5/288	• • {with maintenance features (if not incorporated in	9/022	cable (by rock and pinion drives)
	the buffer <u>B66B 5/0087</u>)}	9/022	. {by rack and pinion drives}. {by screw-nut drives}
		9/023	
7/00	Other common features of elevators		• • {by rope climbing devices}
7/02	 Guideways; Guides (arrangements in mine shafts <u>E21D 7/02</u>) 	9/04	actuated pneumatically or hydraulically (platforms for lifting or lowering through short distances PACE 7(00)
7/021	• • {with a particular position in the shaft}	0/06	<u>B66F 7/00</u>)
7/022	• • {with a special shape}	9/06	• inclined, e.g. serving blast furnaces
7/023	• • {Mounting means therefor}	9/08	. associated with stairways, e.g. for transporting
7/024	• • • {Lateral supports}		disabled persons {(facilitating access of invalids to vehicles A61G 3/02)}
7/025	• • • {End supports, i.e. at top or bottom}	9/0807	{Driving mechanisms}
7/026	• • • {Interconnections}	9/0807	• • • {Briving mechanisms} • • • • {Rack and pinion, friction rollers}
7/027	• • • {for mounting auxiliary devices}	9/0813	{Screw and nut}
7/028	• • {with earthquake protection devices}		
7/04	{Riding means, e.g.} Shoes, Rollers, {between	9/083	• • • {Pull cable, pull chain}
	car and guiding means, e.g. rails, ropes (rollers	9/0838	{Levelling gears}
	adapted to match the shape of a special guiding	9/0846	{Guide rail (<u>B66B 9/0807</u> takes precedence)}
	means <u>B66B 7/02</u> ; vibration attenuation systems	9/0853	• • {Lifting platforms, e.g. constructional features}
	acting between car and its supporting frame B66B 11/026)}	9/0861	• • • {Hanging lifts, e.g. rope suspended seat or platform}
7/041	• • • {including active attenuation system for shocks, vibrations}	9/0869	• • {Collapsible stairways, e.g. operable between a lower level and an upper level}
7/042	• • • { with rollers, shoes }	9/10	 paternoster type (with devices for transferring goods
7/043	{using learning}		into, or out of, the compartments <u>B65G 17/00</u>)
7/044	• • • { with magnetic or electromagnetic means }	9/16	. Mobile or transportable lifts specially adapted to be
7/045	{using learning}		shifted from one part of a building or other structure
7/046	{Rollers}		to another part or to another building or structure
7/047	{Shoes, sliders}	9/187	with a liftway specially adapted for temporary
7/048	{including passive attenuation system for		connection to a building or other structure
,, 0.10	shocks, vibrations}		(<u>B66B 9/193</u> takes precedence)
7/06	Arrangements of ropes or cables	9/193	• with inclined liftways
7/062	• • {Belts}	11/00	Main component parts of lifts in, or associated
7/064	• {Power supply or signal cables}	11,00	with, buildings or other structures
7/066	• • (Chains)	11/0005	• {Constructional features of hoistways}
7/068	• {Cable weight compensating devices}	11/001	• {Arrangement of controller, e.g. location}
7/08	 for connection to the cars or cages, e.g. couplings 	11/0015	• {in the machine room}
7/085	{Belt termination devices}	11/002	• • {in the hoistway}
7/10	 for equalising rope or cable tension 	11/0025	· · · {on the car}
7/12	• Checking, lubricating, or cleaning means for ropes,	11/003	• • {on the counterweight}
	cables or guides	11/0035	• {Arrangement of driving gear, e.g. location or
7/1207	{Checking means}	11/004	support}
7/1215	{specially adapted for ropes or cables}	11/004	(in the heighty av)
7/1223	(by analysing electric variables)	11/0045	(on the corr)
7/123	• • • {by analysing magnetic variables}	11/005	(on the counterweight)
7/1238	• • • {by optical techniques}	11/0055	• • {on the counterweight}
7/1246	• • { specially adapted for guides }		
7/1253	• • {Lubricating means}		
7/1261	• • { specially adapted for ropes or cables}		

11/006	• {Applications of loading and unloading equipment	11/0484	• • • {with a clutch or a coupling system between
	for lifts associated with buildings (of general		several motors, e.g. switching different speeds,
	application <u>B65G</u> ; for paternoster lifts <u>B65G 17/00</u> ;		progressive starting, torque limitation, flywheel
11/0065	for mine lifts <u>B66B 17/14</u>)}	11/0402	(control <u>B66B 1/28</u>)}
11/0065	• {Roping (mining hoist <u>B66B 15/08</u>)}	11/0492	• • {actuated by other systems, e.g. combustion
11/007	• • {for counterweightless elevators}	11/06	engines}with hoisting rope or cable positively attached
11/0075	• • { with hoisting rope or cable positively attached to	11/00	to a winding drum {(B66B 11/0075) takes
11/008	a winding drum}• {with hoisting rope or cable operated by frictional		precedence)}
11/008	engagement with a winding drum or sheave}	11/08	• • with hoisting rope or cable operated by frictional
11/0085	• • { of rucksack elevators }	11/00	engagement with a winding drum or sheave
11/009	 {with separate traction and suspension ropes}		$\{(\underline{B66B \ 11/008} \ takes \ precedence)\}$
11/0095	{whire multiple cars drive in the same hoist	12/00	
11/00/5	way}	13/00	Doors, gates, or other apparatus controlling access to, or exit from, cages or lift well landings (door
11/02	• Cages, {i.e. cars}(doors, gates or other apparatus		fittings, locks <u>E05</u>)
	controlling access to, or exit from, cages	13/02	 Door or gate operation (of general application
	<u>B66B 13/00</u>)	13/02	E05F)
11/0206	• • {Car frames}	13/04	• of swinging doors
11/0213	• • • {for multi-deck cars}	13/06	. of sliding doors
11/022	• • • { with changeable inter-deck distances }	13/08	guided for horizontal movement
11/0226	• • {Constructional features, e.g. walls assembly,	13/10	by car or cage movement
	decorative panels, comfort equipment, thermal or	13/12	 Arrangements for effecting simultaneous opening
	sound insulation}	13/12	or closing of cage and landing doors
11/0233	• • {Lighting systems}	13/125	• • • {electrical}
11/024	• • {Ventilation systems}	13/14	Control systems or devices
11/0246	• • • {Maintenance features (devices facilitating	13/143	• • {electrical}
	maintenance in general <u>B66B 5/0087</u>)	13/146	• • • {method or algorithm for controlling doors}
11/0253	• • • {Fixation of wall panels}	13/16	Door or gate locking devices controlled or
11/026	• • {Attenuation system for shocks, vibrations,		primarily controlled by condition of cage, e.g.
	imbalance, e.g. passengers on the same side		movement or position
	(acting between car or supporting frame and	13/165	{electrical}
	guides <u>B66B 7/04</u> ; acting between car and ropes, cables <u>B66B 7/08</u> ; correcting levelling between	13/18	without manually-operable devices for
	car and floor $\underline{B66B}$ $1/40$)		completing locking or unlocking of doors
11/0266	• • {Passive systems (aerodynamic structure	13/185	• • • • {electrical}
11/0200	B66B 11/0226)}	13/20	Lock mechanisms actuated mechanically
11/0273	• • • {acting between car and supporting frame}		by abutments or projections on the cages
11/028	{Active systems}	13/22	 Operation of door or gate contacts
11/0286	{acting between car and supporting frame}	13/24	• Safety devices in passenger lifts, not otherwise
11/0293	{Suspension locking or inhibiting means to	10/017	provided for, for preventing trapping of passengers
	avoid movement when car is stopped at a floor	13/245	• • {mechanical}
	(locking car to building while loading to avoid	13/26	between closing doors
	movement <u>B66B 17/34</u>)}	13/28	between car or cage and wells
11/04	• Driving gear {; Details thereof, e.g. seals (braking	13/285	{Toe guards or apron devices}
	devices acting on the driving gear <u>B66B 5/02</u> ; of	13/30	. Constructional features of doors or gates (of interest
11/0407	mining-hoist winding devices <u>B66B 15/08</u>)}	12/201	apart from this application <u>E06B</u>)
11/0407	• • {actuated by an electrical linear motor (in the	13/301 13/303	. {Details of door sills}. {Details of door panels}
11/0/15	counterweight <u>B66B 17/12</u>)}	13/305	{Slat doors for elevators}
11/0415 11/0423	• {actuated manually, e.g. additional safety system}• {actuated pneumatically or hydraulically}	13/305	{Stat doors for elevators} {Details of door jambs}
	• {actuated pheumatically of hydraulically}• {actuated by rotating motor; Details, e.g.	13/308	 {Details of door james? {Details of seals and joints}
11/043	ventilation (roping on drum, sheave, winch or	13/306	• • {Details of seals and joints}
	pulley <u>B66B 11/0065</u> ; power supply or control	Lifts in hoist	ways of mines
	B66B 1/28, H02P; motor construction H02K)		
11/0438	• • • { with a gearless driving, e.g. integrated sheave,	15/00	Main component parts of mining-hoist winding
	drum or winch in the stator or rotor of the cage	15/02	devices Pope or cable corriers
	motor}	15/02	Rope or cable carriers
11/0446	• • { with screw-nut or worm-screw gear}	15/04 15/06	. Friction sheaves; "Koepe" pulleys
11/0453	• • { with planetary or epicycloidal gear, e.g.	15/06 15/08	DrumsDriving gear
	differential gear}	15/08	• Diffill gear
11/0461	• • { with rack and pinion gear }	17/00	Hoistway equipment
11/0469	• • { with chain, pinion gear }	17/02	• mounted in head-frames (winding towers for mines
11/0476	• • • {with friction gear, e.g. belt linking motor to		<u>E04H 12/26</u>)
	sheave}	17/04	 Mining-hoist cars or cages

Lifts in hoistways of mines **B66B**

17/06	• • with tiltable platforms	23/12	Steps
17/08	 Mining skips 	23/14	 Guiding means for carrying surfaces
17/10	 adapted for passenger transport 	2023/142	• • {paternoster return type system}
17/12	 Counterpoises 	23/145	• • {Roller assemblies}
17/14	 Applications of loading and unloading equipment (of general application <u>B65G</u>) 	23/147	 {End portions, i.e. means for changing the direction of the carrying surface}
17/16	for loading and unloading mining-hoist cars or	23/16	. Means allowing tensioning of the endless member
17/18	cagesSwinging bridges, e.g. for compensating for	23/18	• • for carrying surfaces
17/16	differences in level between car or cage and	23/20	for handrails
	landing	23/22	Balustrades
17/20	• • by moving vehicles into, or out of, the cars or	23/225	• • {Lighting systems therefor}
	cages	23/24	 Handrails (driving gear therefor <u>B66B 23/02</u>; tensioning means therefor <u>B66B 23/16</u>;
17/22	Securing vehicles in cars or cages		preventing jamming thereof by foreign objects
17/24	mounted on the car or cage		<u>B66B 29/04</u> ; accessories therefor <u>B66B 31/02</u>)
17/26	• • for loading or unloading mining-hoist skips	23/26	of variable speed type
17/28	• electrically controlled (for elevators in general <u>B66B 1/06</u>)	25/00	Control of escalators or moving walkways (walkways of variable speed type <u>B66B 21/12</u> ;
17/30	for cars or cages		handrails of variable speed type <u>B66B 23/26</u> ; of
17/32	for skips		general application <u>G05</u>)
17/34	Safe lift clips; Keps	25/003	• {Methods or algorithms therefor}
17/36	. Gates or other apparatus controlling access to, or	25/006	{Monitoring for maintenance or repair (for security)}
	exit from, cars, cages, or hoistway landings	23/000	reasons B66B 29/005)}
19/00	Mining-hoist operation	27/00	Indicating operating conditions of escalators or
19/002	• {installing or exchanging guide rails (details of rails <u>B66B 7/02</u>)}		moving walkways (of general application G08)
19/005	 {installing or exchanging the elevator drive} 	29/00	Safety devices of escalators or moving walkways
19/007	• {method for modernisation of elevators}		(walkways of variable speed type <u>B66B 21/12;</u>
19/02	 Installing or exchanging ropes or cables 		handrails of variable speed type <u>B66B 23/26</u>)
19/04	. Installing or removing mining-hoist cars, cages, or	29/005	• {Applications of security monitors}
	skips	29/02	 responsive to, or preventing, jamming by foreign
19/06	-	25,02	objects
19/06	 Applications of signalling devices (depth indicators 	29/04	
	• Applications of signalling devices (depth indicators <u>B66B 3/02;</u> order telegraphs <u>G08B</u>)		objects
19/06 20/00	 Applications of signalling devices (depth indicators 	29/04	objects for balustrades or handrails
20/00	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups 	29/04 29/06	objects . for balustrades or handrails . Combplates . Means to facilitate passenger entry or exit (moving
20/00 Escalators of	Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways	29/04 29/06 29/08	objects . for balustrades or handrails . Combplates . Means to facilitate passenger entry or exit (moving handrails B66B 23/24) Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety
20/00 Escalators of 21/00	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 	29/04 29/06 29/08 31/00	objects . for balustrades or handrails . Combplates . Means to facilitate passenger entry or exit (moving handrails B66B 23/24) Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00)
20/00 Escalators of 21/00 21/02	Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators	29/04 29/06 29/08 31/00	objects . for balustrades or handrails . Combplates . Means to facilitate passenger entry or exit (moving handrails B66B 23/24) Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00) . {for cleaning steps or pallets}
20/00 Escalators of 21/00 21/02 21/025 21/04	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators {of variable speed type} linear type 	29/04 29/06 29/08 31/00	objects . for balustrades or handrails . Combplates . Means to facilitate passenger entry or exit (moving handrails B66B 23/24) Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00) . {for cleaning steps or pallets} . {for conveying hand carts, e.g. shopping carts (hand
20/00 Escalators of 21/00 21/02 21/025	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators • {of variable speed type} • linear type • spiral type 	29/04 29/06 29/08 31/00 31/003 31/006	objects . for balustrades or handrails . Combplates . Means to facilitate passenger entry or exit (moving handrails B66B 23/24) Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00) . {for cleaning steps or pallets} . {for conveying hand carts, e.g. shopping carts (hand carts per se B62B 1/00, B62B 3/00)}
20/00 Escalators of 21/00 21/02 21/025 21/04	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators {of variable speed type} linear type 	29/04 29/06 29/08 31/00	objects . for balustrades or handrails . Combplates . Means to facilitate passenger entry or exit (moving handrails B66B 23/24) Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00) . {for cleaning steps or pallets} . {for conveying hand carts, e.g. shopping carts (hand
20/00 Escalators of 21/00 21/02 21/025 21/04 21/06	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators • {of variable speed type} • linear type • spiral type • paternoster type, i.e. the escalator being used simultaneously for climbing and descending (B66B 21/06 takes precedence) 	29/04 29/06 29/08 31/00 31/003 31/006 31/02	objects obj
20/00 Escalators of 21/00 21/02 21/025 21/04 21/06 21/08	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators • {of variable speed type} • linear type • spiral type • paternoster type, i.e. the escalator being used simultaneously for climbing and descending (B66B 21/06 takes precedence) • Moving walkways 	29/04 29/06 29/08 31/00 31/003 31/006 31/02 2201/00	objects obj
20/00 Escalators of 21/00 21/02 21/025 21/04 21/06 21/08	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators • {of variable speed type} • linear type • spiral type • paternoster type, i.e. the escalator being used simultaneously for climbing and descending (B66B 21/06 takes precedence) • Moving walkways • of variable speed type 	29/04 29/06 29/08 31/00 31/003 31/006 31/02 2201/00 2201/10	objects obj
20/00 Escalators of 21/00 21/02 21/025 21/04 21/06 21/08	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators • {of variable speed type} • linear type • spiral type • paternoster type, i.e. the escalator being used simultaneously for climbing and descending (B66B 21/06 takes precedence) • Moving walkways • of variable speed type Component parts of escalators or moving 	29/04 29/06 29/08 31/00 31/003 31/006 31/02 2201/00 2201/10 2201/101	objects output for balustrades or handrails output for combplates Means to facilitate passenger entry or exit (moving handrails B66B 23/24) Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00) for cleaning steps or pallets} for conveying hand carts, e.g. shopping carts (hand carts per se B62B 1/00, B62B 3/00)} for handrails Aspects of control systems of elevators Details with respect to the type of call input Single call input
20/00 Escalators of 21/00 21/02 21/025 21/04 21/06 21/08 21/10 21/12 23/00	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators • {of variable speed type} • linear type • spiral type • paternoster type, i.e. the escalator being used simultaneously for climbing and descending (B66B 21/06 takes precedence) • Moving walkways • of variable speed type Component parts of escalators or moving walkways 	29/04 29/06 29/08 31/00 31/003 31/006 31/02 2201/00 2201/10 2201/101 2201/101	objects . for balustrades or handrails . Combplates . Means to facilitate passenger entry or exit (moving handrails B66B 23/24) Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00) . {for cleaning steps or pallets} . {for conveying hand carts, e.g. shopping carts (hand carts per se B62B 1/00, B62B 3/00)} . for handrails Aspects of control systems of elevators . Details with respect to the type of call input . Single call input . Up or down call input
20/00 Escalators of 21/00 21/02 21/025 21/04 21/06 21/08 21/10 21/12 23/00 23/02	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators • {of variable speed type} • linear type • spiral type • paternoster type, i.e. the escalator being used simultaneously for climbing and descending (B66B 21/06 takes precedence) • Moving walkways • of variable speed type Component parts of escalators or moving walkways • Driving gear 	29/04 29/06 29/08 31/00 31/003 31/006 31/02 2201/00 2201/10 2201/101	objects output for balustrades or handrails output for combplates Means to facilitate passenger entry or exit (moving handrails B66B 23/24) Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00) for cleaning steps or pallets} for conveying hand carts, e.g. shopping carts (hand carts per se B62B 1/00, B62B 3/00)} for handrails Aspects of control systems of elevators Details with respect to the type of call input Single call input
20/00 Escalators of 21/00 21/02 21/025 21/04 21/06 21/08 21/10 21/12 23/00 23/02 23/022	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators • {of variable speed type} • linear type • spiral type • paternoster type, i.e. the escalator being used simultaneously for climbing and descending (B66B 21/06 takes precedence) • Moving walkways • of variable speed type Component parts of escalators or moving walkways • Driving gear • {with polygon effect reduction means} 	29/04 29/06 29/08 31/00 31/003 31/006 31/02 2201/10 2201/10 2201/101 2201/102 2201/103	objects output for balustrades or handrails output for balustrades or handrails output Means to facilitate passenger entry or exit (moving handrails B66B 23/24) Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00) for cleaning steps or pallets for conveying hand carts, e.g. shopping carts (hand carts per se B62B 1/00, B62B 3/00)} for handrails Aspects of control systems of elevators Details with respect to the type of call input Single call input Up or down call input before entering the elevator car
20/00 Escalators of 21/00 21/02 21/025 21/04 21/06 21/08 21/10 21/12 23/00 23/02 23/022 23/024	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators • {of variable speed type} • linear type • spiral type • paternoster type, i.e. the escalator being used simultaneously for climbing and descending (B66B 21/06 takes precedence) • Moving walkways • of variable speed type Component parts of escalators or moving walkways • Driving gear • {with polygon effect reduction means} • {Chains therefor} 	29/04 29/06 29/08 31/00 31/003 31/006 31/02 2201/00 2201/10 2201/101 2201/101	objects . for balustrades or handrails . Combplates . Means to facilitate passenger entry or exit (moving handrails B66B 23/24) Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00) . {for cleaning steps or pallets} . {for conveying hand carts, e.g. shopping carts (hand carts per se B62B 1/00, B62B 3/00)} . for handrails Aspects of control systems of elevators . Details with respect to the type of call input . Single call input . Up or down call input . Destination call input before entering the elevator car . Call input for a preferential elevator car or
20/00 Escalators of 21/00 21/02 21/025 21/04 21/06 21/08 21/10 21/12 23/00 23/022 23/024 23/026	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators • {of variable speed type} • linear type • spiral type • paternoster type, i.e. the escalator being used simultaneously for climbing and descending (B66B 21/06 takes precedence) • Moving walkways • of variable speed type Component parts of escalators or moving walkways • Driving gear • {with polygon effect reduction means} • {Chains therefor} • {with a drive or carrying sprocket wheel located at end portions} 	29/04 29/06 29/08 31/00 31/003 31/006 31/02 2201/10 2201/10 2201/101 2201/102 2201/103	objects output for balustrades or handrails output for balustrades or handrails output handrails B66B 23/24) Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00) for cleaning steps or pallets for conveying hand carts, e.g. shopping carts (hand carts per se B62B 1/00, B62B 3/00) for handrails Aspects of control systems of elevators Details with respect to the type of call input Single call input Up or down call input Destination call input before entering the elevator car Call input for a preferential elevator car or indicating a special request Details of the evaluation method for the allocation
20/00 Escalators of 21/00 21/02 21/025 21/04 21/06 21/08 21/10 21/12 23/00 23/02 23/022 23/024	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators • {of variable speed type} • linear type • spiral type • paternoster type, i.e. the escalator being used simultaneously for climbing and descending (B66B 21/06 takes precedence) • Moving walkways • of variable speed type Component parts of escalators or moving walkways • Driving gear • {with polygon effect reduction means} • {Chains therefor} • {with a drive or carrying sprocket wheel located at end portions} • {with separate drive chain or belt that engages 	29/04 29/06 29/08 31/00 31/003 31/006 31/02 2201/00 2201/10 2201/101 2201/102 2201/103 2201/104	objects output for balustrades or handrails output for balustrades or handrails output for combplates Means to facilitate passenger entry or exit (moving handrails B66B 23/24) Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00) for cleaning steps or pallets for conveying hand carts, e.g. shopping carts (hand carts per se B62B 1/00, B62B 3/00) for handrails Aspects of control systems of elevators Details with respect to the type of call input Single call input Destination call input before entering the elevator car Call input for a preferential elevator car or indicating a special request Details of the evaluation method for the allocation of a call to an elevator car Primary evaluation criteria
20/00 Escalators of 21/00 21/02 21/025 21/04 21/06 21/08 21/10 21/12 23/00 23/02 23/022 23/024 23/026 23/028	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators • {of variable speed type} • linear type • spiral type • paternoster type, i.e. the escalator being used simultaneously for climbing and descending (B66B 21/06 takes precedence) • Moving walkways • of variable speed type Component parts of escalators or moving walkways • Driving gear • {with polygon effect reduction means} • {Chains therefor} • {with a drive or carrying sprocket wheel located at end portions} • {with separate drive chain or belt that engages directly the carrying surface chain} 	29/04 29/06 29/08 31/00 31/003 31/006 31/02 2201/00 2201/10 2201/101 2201/102 2201/103 2201/104 2201/20	objects output for balustrades or handrails output for balustrades or handrails output for balustrades or handrails output for combplates Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00) for cleaning steps or pallets for conveying hand carts, e.g. shopping carts (hand carts per se B62B 1/00, B62B 3/00) for handrails Aspects of control systems of elevators Details with respect to the type of call input Single call input Up or down call input Destination call input before entering the elevator car Call input for a preferential elevator car or indicating a special request Details of the evaluation method for the allocation of a call to an elevator car Primary evaluation criteria Waiting time, i.e. response time
20/00 Escalators of 21/00 21/02 21/025 21/04 21/06 21/08 21/10 21/12 23/00 23/02 23/022 23/024 23/026 23/028 23/04	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators • {of variable speed type} • linear type • spiral type • paternoster type, i.e. the escalator being used simultaneously for climbing and descending (B66B 21/06 takes precedence) • Moving walkways • of variable speed type Component parts of escalators or moving walkways • Driving gear • {with polygon effect reduction means} • {Chains therefor} • {with a drive or carrying sprocket wheel located at end portions} • {with separate drive chain or belt that engages directly the carrying surface chain} • for handrails 	29/04 29/06 29/08 31/00 31/003 31/006 31/02 2201/00 2201/10 2201/101 2201/102 2201/103 2201/104 2201/20 2201/21	objects output for balustrades or handrails output for balustrades or handrails output for combplates Means to facilitate passenger entry or exit (moving handrails B66B 23/24) Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00) for cleaning steps or pallets for conveying hand carts, e.g. shopping carts (hand carts per se B62B 1/00, B62B 3/00) for handrails Aspects of control systems of elevators Details with respect to the type of call input Single call input Destination call input before entering the elevator car Call input for a preferential elevator car or indicating a special request Details of the evaluation method for the allocation of a call to an elevator car Primary evaluation criteria
20/00 Escalators of 21/00 21/02 21/025 21/04 21/06 21/08 21/10 21/12 23/00 23/02 23/022 23/024 23/026 23/028	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators • {of variable speed type} • linear type • spiral type • paternoster type, i.e. the escalator being used simultaneously for climbing and descending (B66B 21/06 takes precedence) • Moving walkways • of variable speed type Component parts of escalators or moving walkways • Driving gear • {with polygon effect reduction means} • {Chains therefor} • {with a drive or carrying sprocket wheel located at end portions} • {with separate drive chain or belt that engages directly the carrying surface chain} • for handrails • with means synchronising the operation of the 	29/04 29/06 29/08 31/00 31/003 31/006 31/02 2201/10 2201/10 2201/101 2201/102 2201/103 2201/20 2201/20 2201/21	objects output for balustrades or handrails output for balustrades or handrails output for balustrades or handrails output for combplates Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00) for cleaning steps or pallets for conveying hand carts, e.g. shopping carts (hand carts per se B62B 1/00, B62B 3/00) for handrails Aspects of control systems of elevators Details with respect to the type of call input Single call input Up or down call input Destination call input before entering the elevator car Call input for a preferential elevator car or indicating a special request Details of the evaluation method for the allocation of a call to an elevator car Primary evaluation criteria Waiting time, i.e. response time
20/00 Escalators of 21/00 21/02 21/025 21/04 21/06 21/08 21/10 21/12 23/00 23/02 23/022 23/024 23/026 23/028 23/04 23/06	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators • {of variable speed type} • linear type • spiral type • paternoster type, i.e. the escalator being used simultaneously for climbing and descending (B66B 21/06 takes precedence) • Moving walkways • of variable speed type Component parts of escalators or moving walkways • Driving gear • {with polygon effect reduction means} • {Chains therefor} • {with a drive or carrying sprocket wheel located at end portions} • {with separate drive chain or belt that engages directly the carrying surface chain} • for handrails • with means synchronising the operation of the steps or the carrying belts and the handrails 	29/04 29/06 29/08 31/00 31/006 31/02 2201/10 2201/101 2201/102 2201/103 2201/104 2201/20 2201/21 2201/21 2201/211 2201/212	objects output for balustrades or handrails output for combplates Means to facilitate passenger entry or exit (moving handrails B66B 23/24) Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00) for cleaning steps or pallets for conveying hand carts, e.g. shopping carts (hand carts per se B62B 1/00, B62B 3/00)} for handrails Aspects of control systems of elevators Details with respect to the type of call input Single call input Destination call input before entering the elevator car Call input for a preferential elevator car or indicating a special request Details of the evaluation method for the allocation of a call to an elevator car Primary evaluation criteria Waiting time, i.e. response time Travel time
20/00 Escalators of 21/00 21/02 21/025 21/04 21/06 21/08 21/10 21/12 23/00 23/02 23/022 23/024 23/026 23/028 23/04	 Applications of signalling devices (depth indicators B66B 3/02; order telegraphs G08B) Elevators not provided for in groups B66B 1/00 - B66B 19/00 r moving walkways Kinds or types of escalators or moving walkways Escalators • {of variable speed type} • linear type • spiral type • paternoster type, i.e. the escalator being used simultaneously for climbing and descending (B66B 21/06 takes precedence) • Moving walkways • of variable speed type Component parts of escalators or moving walkways • Driving gear • {with polygon effect reduction means} • {Chains therefor} • {with a drive or carrying sprocket wheel located at end portions} • {with separate drive chain or belt that engages directly the carrying surface chain} • for handrails • with means synchronising the operation of the 	29/04 29/06 29/08 31/00 31/003 31/006 31/02 2201/10 2201/101 2201/102 2201/103 2201/104 2201/20 2201/21 2201/21 2201/211 2201/212 2201/213	objects output for balustrades or handrails output for balustrades or handrails output for combplates Means to facilitate passenger entry or exit (moving handrails B66B 23/24) Accessories for escalators, or moving walkways, e.g. for sterilising or cleaning (for safety B66B 29/00) for cleaning steps or pallets for conveying hand carts, e.g. shopping carts (hand carts per se B62B 1/00, B62B 3/00)} for handrails Aspects of control systems of elevators Details with respect to the type of call input Up or down call input Destination call input before entering the elevator car Call input for a preferential elevator car or indicating a special request Details of the evaluation method for the allocation of a call to an elevator car Primary evaluation criteria Waiting time, i.e. response time Travel time Travel time

2201/216	Energy consumption	2201/4661 for priority users
2201/210	Secondary evaluation criteria	2201/4669 using passenger condition detectors
2201/22	Penalisation of transfers	
		2201/4676 for checking authorization of the passengers
2201/222	Taking into account the number of passengers present in the elevator car to be allocated	2201/4684 for preventing accidental or deliberate misuse
2201/223	Taking into account the separation of passengers	2201/4692 for payment for use
2201/220	or groups	2201/10/2
2201/224	Avoiding potential interference between elevator	
	cars	
2201/225	Taking into account a certain departure interval of elevator cars from a specific floor, e.g. the ground	
2201/226	floor	
2201/226	 Taking into account the distribution of elevator cars within the elevator system, e.g. to prevent clustering of elevator cars 	
2201/23	. Other aspects of the evaluation method	
2201/231	Sequential evaluation of plurality of criteria	
2201/232	• • • where the time needed for a passenger to arrive	
	at the allocated elevator car from where the call is made is taken into account	
2201/233	Periodic re-allocation of call inputs	
2201/234	. Taking into account uncertainty terms for	
	predicted values, e.g. the predicted arrival time of	
2201/225	an elevator car at the floor where a call is made	
2201/235	Taking into account predicted future events, e.g.	
2201/24	predicted future call inputs	
2201/24	Control of empty elevator cars	
2201/241	Standby control	
2201/242	. Parking control	
2201/243	Distribution of elevator cars, e.g. based on	
2201/30	expected future need	
	 Details of the elevator system configuration Shafts divided into zones 	
2201/301 2201/302	with variable boundaries	
2201/303 2201/304	Express or shuttle elevators Transit control	
2201/304		
2201/305	with sky lobby Multi-deck elevator cars	
2201/300	Tandem operation of multiple elevator cars in the	
2201/307	same shaft	
2201/308	Ganged elevator cars	
2201/300	Details of the change of control mode	
2201/401	by time of the day	
2201/402	 by time of the day by historical, statistical or predicted traffic data, 	
2201/402	e.g. by learning	
2201/403	by real-time traffic data	
2201/404	by cost function evaluation	
2201/405	by cost function evaluation by input of special passenger or passenger group	
2201/405	 by input of special passenger of passenger group by input of human supervisor 	
2201/460	Switches or switchgear	
2201/46	Call registering systems	
	Wherein the destination is registered before	
2201/4013	boarding	
2201/4623	• • • Wherein the destination is registered after boarding	
2201/463	• • • Wherein the call is registered through physical contact with the elevator system	
2201/4638	Wherein the call is registered without	
	making physical contact with the elevator system	
2201/4646	using voice recognition	
2201/4653	wherein the call is registered using portable	
	devices	

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devices