

CPC COOPERATIVE PATENT CLASSIFICATION

B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

TRANSPORTING

B61 RAILWAYS

(NOTE omitted)

B61H BRAKES OR OTHER RETARDING DEVICES SPECIALLY ADAPTED FOR RAIL VEHICLES; ARRANGEMENT OR DISPOSITION THEREOF IN RAIL VEHICLES

(electrodynamic braking of vehicles [B60L](#), in general [H02K](#); arrangements in rail vehicles for adjusting wheel-braking force to meet varying vehicular or permanent-way conditions [B60T 8/00](#); transmitting braking action from initiating means to ultimate brake actuator with power assistance or drive, brake systems incorporating such transmitting means, e.g. air-pressure brake systems, [B60T 13/00](#); construction, arrangement or operation of valves incorporated in power brake systems [B60T 15/00](#); component parts, details or accessories of brake systems [B60T 17/00](#); brakes in general [F16D](#))

WARNING

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

1/00	Applications or arrangements of brakes with a braking member or members co-operating with the periphery of the wheel rim, a drum, or the like (self-applying brakes B61H 11/02; combinations of different types of brakes B61H 11/14; wheels B60B)	9/00	Brakes characterised by or modified for their application to special railway systems or purposes
1/003	• {with an actuator directly acting on a brake head}	9/003	• {for shunting operation or for narrow gauge trains}
1/006	• {Band brakes}	9/006	• {Brakes for locomotives}
3/00	Applications or arrangements of brakes with an outwardly movable braking member or members co-operating with the inner surface of a drum or the like (self-applying brakes B61H 11/02; combinations of different types of brakes B61H 11/14)	9/02	• for aerial, e.g. rope, railways
5/00	Applications or arrangements of brakes with substantially radial braking surfaces pressed together in axial direction, e.g. disc brakes (self-applying brakes B61H 11/02; combinations of different types of brakes B61H 11/14; {discs adapted for mounting on the wheel of a railway vehicle F16D 65/124})	9/04	• for preventing or controlling movement in one direction or, selectively, in either direction
7/00	Brakes with braking members co-operating with the track (positive railway stops or track brakes secured to permanent way B61K 7/00)	9/06	• for storing energy during braking action
7/02	• Scotch blocks, skids, or like track-engaging shoes	11/00	Applications or arrangements of braking or retarding apparatus not otherwise provided for; Combinations of apparatus of different kinds or types
7/04	• . . attached to railway vehicles	11/005	• {in combination with rail sanding, door opening or the like}
7/06	• . . . Skids	11/02	• of self-applying brakes
7/08	• . . . electromagnetically operated	11/04	• . with brake-applying force derived from rotation of axle
7/083	• {working with eddy currents}	11/06	• of hydrostatic, hydrodynamic, or aerodynamic brakes
7/086	• {Suspensions therefor}	11/08	• . comprising a pump or the like circulating fluid, braking being effected by throttling of the circulation
7/10	• . unattached	11/10	• . Aerodynamic brakes with control flaps, e.g. spoilers, attached to the vehicles
7/12	• Grippers co-operating frictionally with tracks	11/14	• Combinations of different types of brakes, e.g. brake blocks acting on wheel-rim combined with disc brakes
		11/16	• Removable self-contained brake units
		13/00	Actuating rail vehicle brakes ({actuators directly acting on a brake head B61H 1/003; } self-applying brakes B61H 11/02; wear-compensating mechanisms B61H 15/00)
		13/005	• {Spring actuation}

B61H

- 13/02 . Hand or other personal actuation
- 13/04 . . by mechanisms incorporating toothed gearing
- 13/06 . Actuating or influencing the brakes by backward pressure of buffers or coupling gear, e.g. buffer brakes
- 13/20 . Transmitting mechanisms ([wear-compensating mechanisms B61H 15/00](#))
- 13/22 . . for braking a single wheel or wheels at one side only, e.g. for locomotives or motor railcars
- 13/24 . . for cars with two axles or bogies with two axles and braking cylinder(s) for each bogie, the mechanisms at each side being interconnected
- 13/26 . . for cars or bogies with more than two axles or bogies, the mechanisms at each side being interconnected
- 13/28 . . with variable leverage or mechanical advantage to obtain quick take-up
- 13/30 . . adjustable to take account of variation of vehicle weight ([automatic adjustment B60T 8/18](#))
- 13/32 . . . by varying brake lever leverage
- 13/34 . Details
- 13/36 . . Beams; Suspension thereof
- 13/38 . . Suspension of transmitting mechanisms ([B61H 13/36 takes precedence](#))

15/00 Wear-compensating mechanisms, e.g. slack adjusters

- 15/0007 . {mechanical and self-acting in one direction}
- 15/0014 . . {by means of linear adjustment}
- 15/0021 . . . {with cams, by friction or clamping}
- 15/0028 . . . {with screw-thread and nut}
- 15/0035 . {mechanical and self-acting in both directions}
- 15/0042 . . {by means of linear adjustment}
- 15/005 . . . {with cams, by friction or clamping}
- 15/0057 . . . {with screw-thread and nut}
- 15/0064 . {mechanical and non-automatic}
- 15/0071 . . {by means of linear adjustment}
- 15/0078 . . . {with cams, by friction or clamping}
- 15/0085 . . . {with screw-thread and nut}
- 15/0092 . {hydraulic}