

CPC COOPERATIVE PATENT CLASSIFICATION

B61H BRAKES OR OTHER RETARDING APPARATUS PECULIAR TO RAIL VEHICLES; ARRANGEMENTS OR DISPOSITIONS OF BRAKES OR OTHER RETARDING APPARATUS 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](#) - [B60T 17/00](#); brakes *per se* [F16D](#))

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)	11/04	. . with brake-applying force derived from rotation of axle
1/003	. {with an actuator directly acting on a brake head}	11/06	. of hydrostatic, hydrodynamic, or aerodynamic brakes
1/006	. {Band brakes}	11/08	. . comprising a pump or the like circulating fluid, braking being effected by throttling of the circulation
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)	11/10	. . Aerodynamic brakes with control flaps, e.g. spoilers, attached to the vehicles
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 })	11/14	. Combinations of different types of brakes, e.g. brake blocks acting on wheel-rim combined with disc brakes
7/00	Brakes with braking members co-operating with the track (positive railway stops or track brakes secured to permanent way B61K 7/00)	11/16	. Removable self-contained brake units
7/02	. Scotch blocks, skids, or like track-engaging shoes	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)
7/04	. . attached to railway vehicles	13/005	. {Spring actuation}
7/06	. . . Skids	13/02	. Hand or other personal actuation
7/08 electromagnetically operated	13/04	. . by mechanisms incorporating toothed gearing
7/083 {working with eddy currents}	13/06	. Actuating or influencing the brakes by backward pressure of buffers or coupling gear, e.g. buffer brakes
7/086 {Suspensions therefor}	13/20	. Transmitting mechanisms (wear-compensating mechanisms B61H 15/00)
7/10	. . unattached	13/22	. . for braking a single wheel or wheels at one side only, e.g. for locomotives or motor railcars
7/12	. Grippers co-operating frictionally with tracks	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
9/00	Brakes characterised by or modified for their application to special railway systems or purposes	13/26	. . for cars or bogies with more than two axles or bogies, the mechanisms at each side being interconnected
9/003	. {for shunting operation or for narrow gauge trains}	13/28	. . with variable leverage or mechanical advantage to obtain quick take-up
9/006	. {Brakes for locomotives}	13/30	. . adjustable to take account of variation of vehicle weight (automatic adjustment B60T 8/18)
9/02	. for aerial, e.g. rope, railways	13/32	. . . by varying brake lever leverage
9/04	. for preventing or controlling movement in one direction or, selectively, in either direction	13/34	. Details
9/06	. for storing energy during braking action	13/36	. . Beams; Suspension thereof
11/00	Applications or arrangements of braking or retarding apparatus not otherwise provided for; Combinations of apparatus of different kinds or types	13/38	. . Suspension or transmitting mechanisms (B61H 13/36 takes precedence)
11/005	. {in combination with rail sanding, door opening or the like}	15/00	Wear-compensating mechanisms, e.g. slack adjusters
11/02	. of self-applying brakes	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}