

# 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](#))

<b>1/00</b>	<b>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</b> (self-applying brakes <a href="#">B61H 11/02</a> ; combinations of different types of brakes <a href="#">B61H 11/14</a> ; wheels <a href="#">B60B</a> )	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
<b>3/00</b>	<b>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</b> (self-applying brakes <a href="#">B61H 11/02</a> ; combinations of different types of brakes <a href="#">B61H 11/14</a> )	11/10	. . Aerodynamic brakes with control flaps, e.g. spoilers, attached to the vehicles
<b>5/00</b>	<b>Applications or arrangements of brakes with substantially radial braking surfaces pressed together in axial direction, e.g. disc brakes</b> (self-applying brakes <a href="#">B61H 11/02</a> ; combinations of different types of brakes <a href="#">B61H 11/14</a> ; {discs adapted for mounting on the wheel of a railway vehicle <a href="#">F16D 65/124</a> })	11/14	. Combinations of different types of brakes, e.g. brake blocks acting on wheel-rim combined with disc brakes
<b>7/00</b>	<b>Brakes with braking members co-operating with the track</b> (positive railway stops or track brakes secured to permanent way <a href="#">B61K 7/00</a> )	11/16	. Removable self-contained brake units
7/02	. Scotch blocks, skids, or like track-engaging shoes	<b>13/00</b>	<b>Actuating rail vehicle brakes</b> ({actuators directly acting on a brake head <a href="#">B61H 1/003</a> ;} self-applying brakes <a href="#">B61H 11/02</a> ; wear-compensating mechanisms <a href="#">B61H 15/00</a> )
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 <a href="#">B61H 15/00</a> )
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
<b>9/00</b>	<b>Brakes characterised by or modified for their application to special railway systems or purposes</b>	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 <a href="#">B60T 8/18</a> )
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
<b>11/00</b>	<b>Applications or arrangements of braking or retarding apparatus not otherwise provided for; Combinations of apparatus of different kinds or types</b>	13/38	. . Suspension or transmitting mechanisms ( <a href="#">B61H 13/36</a> takes precedence)
11/005	. {in combination with rail sanding, door opening or the like}	<b>15/00</b>	<b>Wear-compensating mechanisms, e.g. slack adjusters</b>
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}

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- 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}