

**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](#) to [B60T 17/00](#); brakes per se [F16D](#))

**B61H 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](#))

**B61H 1/003**

- . {with an actuator directly acting on a brake head}

**B61H 1/006**

- . {Band brakes}

**B61H 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](#))

**B61H 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](#)})

**B61H 7/00**

**Brakes with braking members co-operating with the track** (positive railway stops or track brakes secured to permanent way [B61K 7/00](#))

**B61H 7/02**

- . Scotch blocks, skids, or like track-engaging shoes

**B61H 7/04**

- .. attached to railway vehicles

**B61H 7/06**

- ... Skids

**B61H 7/08**

- .... electromagnetically operated

**B61H 7/083**

- ..... {working with eddy currents}

**B61H 7/086**

- ..... {Suspensions therefor}

**B61H 7/10**

- .. unattached

**B61H 7/12**

- . Grippers co-operating frictionally with tracks

**B61H 9/00**

**Brakes characterised by or modified for their application to special railway systems or purposes**

**B61H 9/003**

- . {for shunting operation or for narrow gauge trains}

**B61H 9/006**

- . {Brakes for locomotives}

**B61H 9/02**

- . for aerial, e.g. rope, railways

**B61H 9/04**

- . for preventing or controlling movement in one direction or, selectively, in either direction

**B61H 9/06**

- . for storing energy during braking action

<b>B61H 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>
B61H 11/005	. {in combination with rail sanding, door opening or the like}
B61H 11/02	. of self-applying brakes
B61H 11/04	.. with brake-applying force derived from rotation of axle
B61H 11/06	. of hydrostatic, hydrodynamic, or aerodynamic brakes
B61H 11/08	.. comprising a pump or the like circulating fluid, braking being effected by throttling of the circulation
B61H 11/10	.. Aerodynamic brakes with control flaps, e.g. spoilers, attached to the vehicles
B61H 11/14	. Combinations of different types of brakes, e.g. brake blocks acting on wheel-rim combined with disc brakes
B61H 11/16	. Removable self-contained brake units
<b>B61H 13/00</b>	<b>Actuating rail vehicle brakes ({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>)</b>
B61H 13/005	. {Spring actuation}
B61H 13/02	. Hand or other personal actuation
B61H 13/04	.. by mechanisms incorporating toothed gearing
B61H 13/06	. Actuating or influencing the brakes by backward pressure of buffers or coupling gear, e.g. buffer brakes
B61H 13/20	. Transmitting mechanisms ( <a href="#">wear-compensating mechanisms B61H 15/00</a> )
B61H 13/22	.. for braking a single wheel or wheels at one side only, e.g. for locomotives or motor railcars
B61H 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
B61H 13/26	.. for cars or bogies with more than two axles or bogies, the mechanisms at each side being interconnected
B61H 13/28	.. with variable leverage or mechanical advantage to obtain quick take-up
B61H 13/30	.. adjustable to take account of variation of vehicle weight ( <a href="#">automatic adjustment B60T 8/18</a> )
B61H 13/32	... by varying brake lever leverage
B61H 13/34	. Details
B61H 13/36	.. Beams; Suspension thereof
B61H 13/38	.. Suspension or transmitting mechanisms ( <a href="#">B61H 13/36 takes precedence</a> )
<b>B61H 15/00</b>	<b>Wear-compensating mechanisms, e.g. slack adjusters</b>
B61H 15/0007	. {mechanical and self-acting in one direction}
B61H 15/0014	.. {by means of linear adjustment}
B61H 15/0021	... {with cams, by friction or clamping}
B61H 15/0028	... {with screw-thread and nut}
B61H 15/0035	. {mechanical and self-acting in both directions}
B61H 15/0042	.. {by means of linear adjustment}
B61H 15/005	... {with cams, by friction or clamping}

- B61H 15/0057 . . . {with screw-thread and nut}
- B61H 15/0064 . {mechanical and non-automatic}
- B61H 15/0071 . . {by means of linear adjustment}
- B61H 15/0078 . . . {with cams, by friction or clamping}
- B61H 15/0085 . . . {with screw-thread and nut}
- B61H 15/0092 . {hydraulic}