

ECLA**EUROPEAN 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 [B60T8/00](#); 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, [B60T13/00](#) to [B60T17/00](#); brakes per se [F16D](#))

B61H1/00

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 [B61H11/02](#); combinations of different types of brakes [B61H11/14](#); wheels [B60B](#))

B61H1/00B

- . [N: with an actuator directly acting on a brake head]

B61H1/00D

- . [N: Band brakes] [N9709]

B61H3/00

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 [B61H11/02](#); combinations of different types of brakes [B61H11/14](#))

B61H5/00

Applications or arrangements of brakes with substantially radial braking surfaces pressed together in axial direction, e.g. disc brakes (self-applying brakes [B61H11/02](#); combinations of different types of brakes [B61H11/14](#); [N: discs adapted for mounting on the wheel of a railway vehicle [F16D65/12D2](#)]) [C9505]

B61H7/00

Brakes with braking members co-operating with the track (positive railway stops or track brakes secured to permanent way [B61K7/00](#))

B61H7/02

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

B61H7/04

- . . attached to railway vehicles

B61H7/06

- . . . Skids

B61H7/08

- electromagnetically operated

B61H7/08A

- [N: working with eddy currents]

B61H7/08B

- [N: Suspensions therefor]

B61H7/10

- . . unattached

B61H7/12

- . Grippers co-operating frictionally with tracks

B61H9/00

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

B61H9/00B

- . [N: for shunting operation or for narrow gauge trains] [N9709]

B61H9/00D

- . [N: Brakes for locomotives] [N9709]

- B61H9/02 . for aerial, e.g. rope, railways
- B61H9/04 . for preventing or controlling movement in one direction or, selectively, in either direction
- B61H9/06 . for storing energy during braking action
- B61H11/00 Applications or arrangements of braking or retarding apparatus not otherwise provided for; Combinations of apparatus of different kinds or types**
- B61H11/00B . [N: in combination with rail sanding, door opening or the like] [N9709]
- B61H11/02 . of self-applying brakes
- B61H11/04 . . with brake-applying force derived from rotation of axle
- B61H11/06 . of hydrostatic, hydrodynamic, or aerodynamic brakes
- B61H11/08 . . comprising a pump or the like circulating fluid, braking being effected by throttling of the circulation
- B61H11/10 . . Aerodynamic brakes with control flaps, e.g. spoilers, attached to the vehicles
- B61H11/14 . Combinations of different types of brakes, e.g. brake blocks acting on wheel-rim combined with disc brakes
- B61H11/16 . Removable self-contained brake units
- B61H13/00 Actuating rail vehicle brakes ([N: actuators directly acting on a brake head [B61H1/00B](#)]; self-applying brakes [B61H11/02](#); wear-compensating mechanisms [B61H15/00](#))**
- B61H13/00B . [N: Spring actuation] [N9709]
- B61H13/02 . Hand or other personal actuation
- B61H13/04 . . by mechanisms incorporating toothed gearing
- B61H13/06 . Actuating or influencing the brakes by backward pressure of buffers or coupling gear, e.g. buffer brakes
- B61H13/20 . Transmitting mechanisms ([wear-compensating mechanisms \[B61H15/00\]\(#\)](#))
- B61H13/22 . . for braking a single wheel or wheels at one side only, e.g. for locomotives or motor railcars
- B61H13/24 . . for cars with two axles or bogies with two axles and braking cylinder(s) for each bogie, the mechanisms at each side being interconnected
- B61H13/26 . . for cars or bogies with more than two axles or bogies, the mechanisms at each side being interconnected
- B61H13/28 . . with variable leverage or mechanical advantage to obtain quick take-up
- B61H13/30 . . adjustable to take account of variation of vehicle weight ([automatic adjustment \[B60T8/18\]\(#\)](#))
- B61H13/32 . . . by varying brake lever leverage
- B61H13/34 . Details

- B61H13/36 . . Beams; Suspension thereof
- B61H13/38 . . Suspension or transmitting mechanisms ([B61H13/36](#) takes precedence)

B61H15/00 Wear-compensating mechanisms, e.g. slack adjusters

- B61H15/00A . [N: mechanical and self-acting in one direction]
- B61H15/00A1 . . [N: by means of linear adjustment]
- B61H15/00A1A . . . [N: with cams, by friction or clamping]
- B61H15/00A1B . . . [N: with screw-thread and nut]

- B61H15/00B . [N: mechanical and self-acting in both directions]
- B61H15/00B1 . . [N: by means of linear adjustment]
- B61H15/00B1A . . . [N: with cams, by friction or clamping]
- B61H15/00B1B . . . [N: with screw-thread and nut]

- B61H15/00C . [N: mechanical and non-automatic]
- B61H15/00C1 . . [N: by means of linear adjustment]
- B61H15/00C1A . . . [N: with cams, by friction or clamping]
- B61H15/00C1B . . . [N: with screw-thread and nut]

- B61H15/00D . [N: hydraulic]