CPC  COOPERATIVE PATENT CLASSIFICATION

B  PERFORMING OPERATIONS; TRANSPORTING

TRANSPORTING

B61  RAILWAYS

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

1/003  . { with an actuator directly acting on a brake head}

1/006  . { Band brakes}

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

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)

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

7/02  . Scotch blocks, skids, or like track-engaging shoes

7/04  . attached to railway vehicles

7/06  . . . Skids

7/08  . . . electromagnetically operated

7/083  . . . . . { working with eddy currents}

7/086  . . . . . . {Suspensions therefor}

7/10  . . unattached

7/12  . Grippers co-operating frictionally with tracks

9/00  Brakes characterised by or modified for their application to special railway systems or purposes

9/003  . { for shunting operation or for narrow gauge trains}

9/006  . { Brakes for locomotives}

9/02  . for aerial, e.g. rope, railways

9/04  . for preventing or controlling movement in one direction or, selectively, in either direction

9/06  . for storing energy during braking action

11/00  Applications or arrangements of braking or retarding apparatus not otherwise provided for; Combinations of apparatus of different kinds or types

11/005  . { in combination with rail sanding, door opening or the like}

11/02  . of self-applying brakes

11/04  . . with brake-applying force derived from rotation of axle

11/06  . of hydrostatic, hydrodynamic, or aerodynamic brakes

11/08  . . comprising a pump or the like circulating fluid, braking being effected by throttling of the circulation

11/10  . . Aerodynamic brakes with control flaps, e.g. spoilers, attached to the vehicles

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}
Hand or other personal actuation
by mechanisms incorporating toothed gearing
Actuating or influencing the brakes by backward
downward pressure of buffers or coupling gear, e.g. buffer
brakes
Transmitting mechanisms (wear-compensating
mechanisms B61H 15/00)
for braking a single wheel or wheels at one side
only, e.g. for locomotives or motor railcars
for cars with two axles or bogies with two axles
and braking cylinder(s) for each bogie, the
mechanisms at each side being interconnected
for cars or bogies with more than two axles
or bogies, the mechanisms at each side being
interconnected
with variable leverage or mechanical advantage to
obtain quick take-up
adjustable to take account of variation of vehicle
weight (automatic adjustment B60T 8/18)
by varying brake lever leverage
Details
Beams; Suspension thereof
Suspension of transmitting mechanisms
(B61H 13/36 takes precedence)
Wear-compensating mechanisms, e.g. slack
adjusters
[mechanical and self-acting in one direction]
[by means of linear adjustment]
[with cams, by friction or clamping]
[with screw-thread and nut]
[mechanical and self-acting in both directions]
[by means of linear adjustment]
[with cams, by friction or clamping]
[with screw-thread and nut]
[mechanical and non-automatic]
[by means of linear adjustment]
[with cams, by friction or clamping]
[with screw-thread and nut]
[hydraulic]