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)

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 (self-applying brakes B61H 11/02; combinations of different types of brakes B61H 11/14; wheels B60B)
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 (self-applying brakes B61H 11/02; combinations of different types of brakes B61H 11/14)

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]
13/02  . Hand or other personal actuation
13/04  . . by mechanisms incorporating toothed gearing
Actuating or influencing the brakes by backward 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]