[14] The advantage of this variant is that it is possible, with a single assembly consisting of the plate 184 and joining bushings 180, to create the seal between the entire brake head 103 and the entire wear plate(s) 102.

[15] The plate 184 is fixed to the brake head 103 by mechanical means, for example by four bolts 300, as is schematically illustrated in FIG. 7.

[16] A friction assembly is thus known for a railway disc brake system for railway rolling stock, the friction assembly comprising a brake head on the one hand, and on the other hand at least one wear plate made of friction material comprising a first face which is the friction face, and a second face opposite to said first face, the wear plate being suitable for being integrally secured to the brake head, the friction assembly further comprising a part able to collect the particles emitted by said wear plate (in the above case, this part is the assembly consisting of the plate 184 and the joining bushings 180).

[17] During use, under the effect of vibrations, from forces undergone by the wear plate and the brake head, there is a risk that the part will come loose from the brake head. This loss of the part would be detrimental, in particular given the speed of the vehicle.

Summary

[17a] According to an aspect, the present disclosure refers to a friction assembly for a railway disc brake system for railway rolling stock, said friction assembly comprising a brake head on the one hand, and on the other hand at least one wear plate made of friction material comprising a first face which is a friction face, and a second face opposite to said first face, said wear plate being suitable for being integrally secured to said brake head, said friction assembly further comprising a part able to collect particles emitted by said wear plate, characterized in that said part able to collect particles comprises a connection able to engage with a fastening element suitable to fasten said friction assembly to a brake shoe such that said part is held in a position of being integrally secured to said brake head when said fastening element is fastening the friction assembly to said brake shoe.

Claims

[Claim 1] Friction assembly for a railway disc brake system for railway rolling stock, said friction assembly comprising a brake head on the one hand, and on the other hand at least one wear plate made of friction material comprising a first face which is a friction face, and a second face opposite to said first face, said wear plate being suitable for being integrally secured to said brake head, said friction assembly further comprising a part able to collect particles emitted by said wear plate, characterized in that said part able to collect particles comprises a connection able to engage with a fastening element suitable to fasten said friction assembly to a brake shoe such that said part is held in a position of being integrally secured to said brake head when said fastening element is fastening the friction assembly to said brake shoe.

[Claim 2] Friction assembly according to claim 1, wherein said connection at least partially surrounds said fastening element.

[Claim 3] Friction assembly according to claim 2, wherein said fastening element is a rod, and said connection consists of at least one ring through which said rod is able to slide.

[Claim 4] Friction assembly according to claim 3, wherein said connection consists of two rings.

[Claim 5] Friction assembly according to any one of the preceding claims, wherein said wear plate comprises at least one channel traversing said wear plate from said first face to said second face, said brake head comprising at least one through-hole of central axis A and located facing one among said at least one channel, and wherein said part comprises a plate and at least one joining bushing mounted on said plate, said at least one joining bushing being inserted into said at least one through-hole and establishing a connection with said at least one channel, said part being in a position of being integrally secured to said brake head when said at least one joining bushing is inserted in said at least one through-hole.

[Claim 6] Friction assembly according to claim 5, wherein the friction assembly comprises two joining bushings, two channels, and two through-holes.