Claims

[Claim 1] A friction braking device (10) including a caliper (12), at least one pad (16) that is mobile in translation along an axis (A) of movement relative to the caliper (12), said at least one pad (16) being intended to cooperate with a brake disc, and at least one piston (14) movably mounted on the caliper (12) and capable of moving said pad (16) axially in translation, said at least one pad (16) including at least one particle suction zone (28) that includes a suction port (30), wherein the friction braking device (10) further includes a suction pipe (60) including a first rigid portion (64-1) having a first end (62) able to face said suction port (30) of the pad (16) and a second end (65), the suction pipe (60) including an axially extendable flexible portion (66) having a first end (67) connected to the first rigid portion (64-1) and a second end (69) intended to be connected to means for aspirating said particles.

[Claim 2] The friction braking device (10) as claimed in claim 1, wherein said suction pipe (60) includes a second rigid portion (64-2) having a first end (71) connected to the second end (69) of said flexible portion (66) and a second end (63) intended to be connected to said suction means.

[Claim 3] The friction braking device (10) as claimed in claim 1, wherein said flexible portion (66) includes at least one bellows (70).

[Claim 4] The friction braking device (10) as claimed in claim 1, wherein said flexible portion (66) is made of an elastomer material.

[Claim 5] The friction braking device (10) as claimed in claim 1, wherein said suction pipe (60) is fixed to the at least one pad (16), said first end (62) of the first rigid portion (64-1) being adapted to contact in a sealed manner said at least one pad (16) opposite said suction port (30) of the at least one pad (16) in such a manner as to connect said suction pipe (60) and said suction zone (28) of the at least one pad (16).

[Claim 6] The friction braking device (10) as claimed in claim 1, wherein said suction pipe (60) is fixed to the piston (14), said first end (62) of the first rigid portion (64-1) being capable of contacting in a sealed manner said pad (16) opposite said suction port (30) of the at least one pad (16) in such

a manner as to connect said suction pipe (60) and said suction zone (28) of the at least one pad (16).

[Claim 7] The friction braking device (10) as claimed in claim 1, wherein the caliper (12) is a floating caliper capable of being moved axially in translation relative to a caliper support, the at least one pad (16) including a first pad (16) and a second pad (36), the first pad (16) being actuated directly by the piston (14), the second pad (36) being actuated directly by a rear portion (39) of the floating caliper, the suction pipe (60) being a first suction pipe (60) being capable of being connected to a suction zone (28) of the first pad (16), the friction braking device (10) further comprising a second suction pipe (90) being capable of being connected to a suction zone (48) of the second pad (36).

[Claim 8] The friction braking device (10) as claimed in the preceding claim, wherein the rear portion (39) of the floating caliper includes a suction port (80), the second suction pipe (90) being connected to said suction port (80) of the floating caliper, said suction port (80) of the floating caliper being capable of contacting in a sealed manner the second pad (36) opposite the suction zone (48) of said second pad (36) in such a manner as to connect said second suction pipe (90) and said suction zone (48) of the second pad (36).

[Claim 9] The friction braking device (10) as claimed in claim 1, wherein the caliper (12) is a so-called fixed caliper, the at least one pad (16) including a first pad (16) on a vehicle side and a second pad (36) on a rim side, the first and second pads (16, 36) being actuated directly by at least one piston (14, 104), the suction pipe being a first suction pipe (60) being capable of being connected to a suction zone (28) of the first pad (16), the friction braking device (10) further comprising a second suction pipe (110) being capable of being connected to a suction zone (48) of the second pad (36).

[Claim 10] The friction braking device (10) as claimed in claim 7, wherein said first suction pipe (60) and/or the second suction pipe (110) include(s) a first rigid portion (64-1) connected to the pad (16, 36) and an axially extendable flexible portion (66).