Claims

[Claim 1] A friction braking device (10) including a caliper (12), at least one pad (16) mobile in translation along an axis (A) 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 at least one 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) fixed to the piston (14), said suction pipe (60) including an end (62) which sealingly contacts said at least one pad (16), opposite said suction port (30) of the at least one pad (16), and in such a manner as to connect said suction pipe (60) and said suction zone (28) of the pad (16).

[Claim 2] The friction braking device (10) of claim 1, wherein the end (62) of the suction pipe (60) is rigidly connected to a support (74), said support (74) being fixed to the piston (14).

[Claim 3] The friction braking device (10) of claim 2, wherein said support (74) includes a port (76) facing the corresponding end (62) of the pipe (60), said support (74) sealingly contacting the pad (16) so that the suction port (30) in the at least one pad (16) and the port (76) in the support face one another.

[Claim 4] The friction braking device (10) of claim 1, wherein the suction pipe (60) includes at least one rigid portion (64, 64-1, 64-2), fixed to the piston (14), and a flexible portion (66) allowing the piston (14) to make an axial movement.

[Claim 5] The friction braking device (10) of claim 4, wherein the flexible portion (66) includes at least one bellows (70).

[Claim 6] The friction braking device (10) of claim 1, wherein the caliper (12) is a floating caliper capable of being moved axially in translation relative to a caliper support (13), the at least one pad (16) comprising an inner pad (16) and an outer pad (36), the inner pad (16) being actuated directly by the piston (14), the outer pad being actuated directly by a rear portion (39) of

the floating caliper, a first suction pipe (60) being connected to a suction zone (28) of the inner pad (16), a second suction pipe (90) being connected to a suction zone (48) of the outer pad (36).

[Claim 7] The friction braking device (10) of claim 6, 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 (12) sealingly contacting the outer pad (36) opposite the suction zone (48) of said outer pad (36) in such a manner as to connect said second suction pipe (90) and said suction zone (48) of the outer pad (36).

[Claim 8] The friction braking device (10) of claim 1, wherein the caliper (12) is a so-called fixed caliper, the at least one pad (16) comprising an inner pad (16) on the vehicle side and an outer pad (36) on the rim side, each of the inner and outer pads (16, 36) being actuated directly by at least one respective piston (104), a first suction pipe (60) being connected to a suction zone (28) of the inner pad (16), a second suction pipe (110) being connected to a suction zone (48) of the outer pad (36).

[Claim 9] The friction braking device (10) of claim 8, wherein each of the first and second suction pipes (60, 110) is fixed to the at least one respective piston (14, 104), each of the first and second suction pipes (60, 110) including an end (112) sealingly contacting the respective inner or outer pad (16, 36), opposite suction ports (30, 50) of the respective inner and outer pads (16, 36), in such a manner as to connect the respective suction pipes (60, 110) to said respective suction zones (28, 48) of the respective inner and outer pads (16, 36).