of identifying the absence of the filter on the pneumatic circuit and of informing a user of this absence of the filter.

[7] Due to these arrangements, an absence of the filter on the pneumatic circuit is detected and determined, and the user is immediately informed via the control unit. One will note that the control unit is capable of identifying both an absence of the filter on its support, and an absence of the support (with its filter) on the pipe. Indeed, in some cases it is more practical to change the assembly composed of the support and filter. The user can then act accordingly, and place a filter on its support or place a support (with its filter) on the pipe, in order to prevent the release of harmful particles into the atmosphere.

[7a] According to an aspect, the present disclosure refers to a system for capturing braking particles from a friction brake system, which comprises a vacuum source, a pneumatic circuit which connects said friction brake system to said vacuum source, and a filter located on said pneumatic circuit and mounted on a support, characterized in that said capturing system comprises a control unit and a detection device for said filter which is capable of sending at least one signal to said control unit, said control unit being capable, on the basis of this at least one signal, of identifying the absence of said filter on said pneumatic circuit and of informing a user of this absence of said filter, wherein said detection device comprises exactly one pressure sensor which is located on said pneumatic circuit upstream of said filter, said pressure sensor being capable of sending in a signal to said control unit a measurement of the pressure P1 in said pneumatic circuit upstream of said filter, said control unit, upon receiving said signal, being capable of comparing said measured pressure P1 with a reference pressure PR which is the pressure in said pneumatic circuit in the absence of a filter for the reference operating state ER of said vacuum source during said measurement of pressure P1 by said pressure sensor, said control unit being capable of informing a user of the absence of said filter on said pneumatic circuit when said measured pressure P1 is substantially equal to said reference pressure PR or is substantially equal to the atmospheric pressure.

[7b] According to another aspect, the present disclosure refers to a method for detecting the absence of a filter in a system for capturing braking particles from a friction brake system, this capturing system comprising a vacuum source, a pneumatic circuit which connects said friction brake system to said vacuum source, and a filter located on said pneumatic circuit and mounted on a support, said method being characterized in that it comprises the following steps: (a) a control unit and a detection device for said filter are provided, which form part of said capturing system, the detection device comprising exactly one pressure sensor which is located on said pneumatic circuit upstream of said filter; (b) said pressure sensor being capable of sending in a pressure signal to said control unit a measurement of the pressure P1 in said pneumatic circuit upstream of said filter; (c) said control unit, upon receiving said pressure signal, being capable of comparing said measured pressure P1 with a reference pressure PR which is the pressure in said pneumatic circuit in the absence of a filter for the reference operating state ER of said vacuum source during said measurement of pressure P1 by said pressure sensor, said control unit being capable of informing a user of the absence of said filter on said pneumatic circuit when said measured pressure P1 is substantially equal to said reference pressure PR or is substantially equal to the atmospheric pressure.

[8] Advantageously, the detection device comprises a pressure sensor which is located on the pneumatic circuit upstream of the filter, the pressure sensor being capable of sending in a signal to the control unit a measurement of the pressure P_1 in the pneumatic circuit upstream of the filter, the control unit, upon receiving this signal, being capable of comparing the measured pressure P_1 with a reference pressure P_R which is the pressure in the pneumatic circuit in the absence of a filter for the reference operating state E_R of the vacuum source during the measurement of pressure P_1 by the pressure sensor, the control unit being capable of informing a user of the absence of the filter on the pneumatic circuit when the measured pressure P_1 is substantially equal to the reference pressure P_R or is substantially equal to the atmospheric pressure.

[9] Thus, in the case where the circuit or the filter support already includes a pressure sensor, it is not necessary to install an additional detection device.

[10] Advantageously, the detection device comprises a first pressure sensor which is located on the pneumatic circuit upstream of the filter, the pressure sensor being capable of sending in a signal to the control unit a measurement of the first pressure P_1 in the pneumatic circuit upstream of the filter, and a second pressure sensor which is located on the pneumatic circuit downstream of the filter and which is capable of sending in a signal to the control unit a measurement of the second pressure P_2 in the pneumatic circuit downstream of the filter, the control unit, upon receiving this at least one signal, being capable of comparing the first measured pressure P_1 and the second measured pressure P_2, the control unit being capable