thereof by a conduit whose outer end opens outside the friction surface by an inlet, and whose inner end opens into the at least one collection groove by an outlet which forms a section break with the at least one groove such that there exists, in operation, a reduced pressure between the inlet of the conduit and the at least one collection groove through the conduit.

**[0010]** As explained above, the aspiration and capture of brake particles in the braking system described above are done by generating an airflow which passes into the collection groove. Tests done by the inventors show that the greater the air speed near the surface of the disk (or of the wheel), the better the effectiveness of the capture of particles. This means that the faster the speed of the air along the friction surface of the lining, and therefore the faster the airflow rate, the more effective the aspiration of the particles.

**[0011]** However to limit load losses and therefore the power of the aspiration source, the airflow rate passing into the groove must be reduced. There are therefore two competing needs.

## SUMMARY

**[0012]** The invention aims to propose a brake pad which serves to increase the speed of the air along the friction surface of the lining without having to increase the flow rate passing in the collection groove.

**[0013]** This goal is achieved because the angle of inclination between the axis of the conduit and the longitudinal axis of the groove is nonzero and is inclined such that the airflow near the friction surface of the lining is not perpendicular to the friction surface.

**[0014]** Because of these arrangements, the airflow which passes in the groove has a velocity distribution with height in the groove which is maximal along the friction surface of the lining. The aspiration of particles in the groove is thus optimized.

[0014a] In an aspect, the present disclosure refers to a brake pad comprising a backing plate with an outer surface, an inner surface and a lateral edge, and a lining of friction material fixed to said inner surface, wherein the lining is delimited by a

friction surface, an attachment surface, and a lateral edge formed of an inner edge, an outer edge, a rear edge, and a front edge, wherein said lining is provided with at least one collection groove open to the friction surface and located at least in part near the rear edge, wherein the backing plate comprises at least one aspiration hole in fluid communication with said at least one collection groove, wherein said at least one aspiration hole is connectable to a vacuum source to create an airflow, wherein the at least one collection groove is extended at at least one of the ends thereof by a conduit whose outer end opens outside said friction surface by an inlet, and whose inner end opens in said at least one collection groove by an outlet which forms a section break with said at least one collection groove such that there exists, in operation, a reduced pressure between said inlet of the conduit and said at least one collection groove through said conduit, and wherein an angle of inclination between an axis of the conduit and a longitudinal axis of the at least one collection groove is nonzero and is such that in operation the airflow near the friction surface of the lining is not perpendicular to the friction surface.

**[0015]** For example, the angle of inclination is broken down into a primary angle in a plane perpendicular to the plane of the friction surface and a secondary angle in the plane of the friction surface, where the primary angle is measured positively from the plane of the friction surface towards said backing plate on the outside of the