

Title (en)

CLEANING DEVICE FOR CLEANING A SURFACE COMPRISING A BRUSH AND A SQUEEGEE ELEMENT

Title (de)

REINIGUNGSVORRICHTUNG ZUR REINIGUNG EINER OBERFLÄCHE MIT EINER BÜRSTE UND RAKELEMENT

Title (fr)

DISPOSITIF DE NETTOYAGE DESTINÉ À NETTOYER UNE SURFACE

Publication

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Application

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Abstract (en)

[origin: WO2013027164A1] The present invention relates to a cleaning device for cleaning a surface (20), comprising: -a nozzle arrangement (10) that comprises i) a brush (12) rotatable about a brush axis (14), said brush (12) being provided with flexible brush elements (16) having tip portions (18) for contacting the surface to be cleaned (20) and picking up dirt particles (22) and liquid (24) from the surface (20) during a pick-up period when the brush elements (16) contact the surface (20) during the rotation of the brush (12), wherein a linear mass density of a plurality of the brush elements (16) is, at least at the tip portions (18), lower than 150 g per 10 km, and ii) a single squeegee element (32) for pushing or wiping dirt particles (22) and liquid (24) across or off the surface to be cleaned (20) during movement of the cleaning device (100), said squeegee element (32) being spaced apart from the brush (12) and extending substantially along a longitudinal direction (48) being substantially parallel to the brush axis (14), wherein a suction area (34) is defined within the nozzle arrangement (10) between the squeegee element (32) and the brush (12), -a drive means for driving the brush (12) in rotation, wherein the drive means are adapted to realize a centrifugal acceleration at the tip portions (18) which is, in particular during a dirt release period when the brush elements (16) are free from contact to the surface (20) during rotation of the brush (12), at least 3,000 m/s², and -a vacuum aggregate (38) for generating an under-pressure in the suction area (34) for ingesting dirt particles (22) and liquid (24).

IPC 8 full level

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Citation (search report)

See references of WO 2013027164A1

Cited by

EP3270756A4; WO2018024669A1; US10813514B2

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