

Title (en)  
APPARATUS FOR CLEANING HARD TOP GROUND SURFACES

Publication  
**EP 0288436 B1 19910130 (DE)**

Application  
**EP 88810242 A 19880415**

Priority  
CH 155787 A 19870423

Abstract (en)  
[origin: JPS6448912A] PURPOSE: To use the same cleaning vehicle as a snow remover or a vacuum cleaner by a method wherein a flow of air to a plurality of blowing nozzles is regulated by a varying deflecting device. CONSTITUTION: Suction ports 29 and 30 connected to the suction side of a fan are elevatably arranged in an air supply duct and blowing nozzles 23, 24, 25, and 26 are pointed in the direction of the suction ports 29 and 30. A varying deflecting device 21 is provided to guide a flow of air generated by the fan to the blow nozzles 23 and 24 arranged from a left to a right in the longitudinal direction of the air supply duct 19, the blow nozzles 25 and 26 arranged from a right to a left in the longitudinal direction of the air supply duct 19, or to all the nozzles 23, 24, 25, and 26. This constitution uses the same cleaning vehicle, having the same device, as a cleaning air supply vehicle for removing snow or as a vacuum cleaning vehicle.

IPC 1-7  
**E01H 1/08; E01H 5/09; E01H 6/00**

IPC 8 full level  
**E01H 1/08** (2006.01); **E01H 5/09** (2006.01); **E01H 5/10** (2006.01); **E01H 6/00** (2006.01)

CPC (source: EP US)  
**E01H 1/0818** (2013.01 - EP US); **E01H 1/0872** (2013.01 - EP US); **E01H 5/092** (2013.01 - EP US); **E01H 5/106** (2013.01 - EP US); **E01H 6/00** (2013.01 - EP US)

Cited by  
EP2133473A1; EP3042996A1; CN101886372A; ES2237257A1; US5611268A; DE3924646A1; ITMO20120145A1; DE4414628A1; EP0400759A3; DE19524203A1; DE19524203C2; US5452492A; US5768744A; ES2268981A1; CN108625325A; EP0799938A3; CN103293984A; CN114673060A; RU2658385C2; CN109914314A; WO9012153A1; US10094083B2

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DOCDB simple family (publication)  
**EP 0288436 A1 19881026; EP 0288436 B1 19910130**; AT E60636 T1 19910215; CA 1304545 C 19920707; CN 1012831 B 19910612; CN 88101993 A 19881102; DE 3861700 D1 19910307; ES 2021160 B3 19911016; GR 3001838 T3 19921123; JP H0581681 B2 19931115; JP S6448912 A 19890223; US 4858270 A 19890822

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