

Title (en)  
Apparatus for treating soil or roads

Title (de)  
Vorrichtung zum Bearbeiten von Böden oder Fahrbahnen

Title (fr)  
Dispositif de traitement de sols ou des chaussées

Publication  
**EP 1396581 B1 20081008 (DE)**

Application  
**EP 03018677 A 20030822**

Priority  
DE 10241067 A 20020905

Abstract (en)  
[origin: EP1396581A2] The machine has a frame with working roller below a roller housing (8). This has a spray device (10) for water or binding agent, with a nozzle (12) direction into a working chamber. The nozzle has a controlled closure device (18) with closure element (22), to open and close the nozzle. The closure device can initiate a further movement of the closure element past the closing position, to remove collected material in and/or in front of the nozzle. The nozzle is connected to ring pipe (14) or a tank. The spray device has a mixer unit (36) with expansion chamber (38), and a bitumen injection nozzle (40) to mix hot bitumen with water or with water and air, for ejection of foamed bitumen from the spray nozzle.

IPC 8 full level  
**E01C 21/00** (2006.01); **B05B 1/30** (2006.01); **B05B 15/02** (2006.01); **B05B 15/522** (2018.01); **E01C 23/06** (2006.01)

CPC (source: EP US)  
**B05B 1/3046** (2013.01 - EP US); **B05B 15/5225** (2018.01 - EP US); **E01C 21/00** (2013.01 - EP US); **E01C 23/065** (2013.01 - EP US)

Cited by  
EP2857108A1; CN105544363A; CN101886366A; CN111608050A; EP2508676A1; US10927513B2; US10329910B2; US8944518B2; US9512718B2; US9175448B2; US9797245B2; US10408056B2; DE102013016515A1; US9376774B2; US9598825B2; US10066347B2; US8775099B2; US9873994B2; US10787776B2; US11519141B2; US10287882B2; US10323516B2; US11401808B2; US10416056B2; US11506585B2; US10156046B2; US10794010B2; US11346062B2

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DOCDB simple family (publication)  
**EP 1396581 A2 20040310**; **EP 1396581 A3 20041222**; **EP 1396581 B1 20081008**; **EP 1396581 B3 20160601**; AT E410553 T1 20081015; DE 10241067 B3 20040422; DE 50310599 D1 20081120; US 2004146353 A1 20040729; US 6887013 B2 20050503; ZA 200306918 B 20040617

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