

Title (en)  
SAND SHAKE-OUT DEVICE USING VIBRATION

Title (de)  
VORRICHTUNG ZUM SANDAUSRÜTTELN PER VIBRATION

Title (fr)  
DISPOSITIF A DECOCHER LE SABLE PAR VIBRATION

Publication  
**EP 1997573 A4 20101229 (EN)**

Application  
**EP 07740198 A 20070322**

Priority  
• JP 2007056760 W 20070322  
• JP 2006080497 A 20060323

Abstract (en)  
[origin: EP1997573A1] A device for removing sand from a workpiece by vibration which is adapted to vibrate a molding (workpiece) molded by casting such as an automobile part to thereby remove core sand remaining in a hollow portion of the workpiece and in which the workpiece is held against a vibration plate and the vibration plate is vibrated with a single vibration motor to remove the sand. The device for removing sand from a workpiece (1) by vibration which removes sand remaining on the workpiece (1) by vibration, the device comprising a base (3), a vibration plate (5) mounted on the base (3) via elastic support members (4), a workpiece holder (6) provided on the vibration plate (5), and a vibration motor (7) connected to the vibration plate (5); wherein the workpiece is held with the holder (6), and the vibration motor (7) is subsequently actuated to vibrate the vibration plate (.5), thereby applying vibration to the workpiece (1) held with the holder (6) to remove the sand from the workpiece (1).

IPC 8 full level  
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**B22D 29/00** (2013.01 - KR); **B22D 29/005** (2013.01 - EP US); **B22D 29/006** (2013.01 - EP US); **B22D 31/002** (2013.01 - EP US)

Citation (search report)  
• [XPI] WO 2006074676 A1 20060720 - FROELICH & KLUEPFEL DRUCKLUFT [DE], et al  
• [XI] EP 0325928 A2 19890802 - FROELICH & KLUEPFEL DRUCKLUFT [DE]  
• [XI] DE 3637367 A1 19870625 - LUEBER WERNER  
• [XI] US 5213150 A 19930525 - SENSENSTEIN JAKOB H [US]  
• [AD] JP H0377681 U 19910805  
• See references of WO 2007111364A1

Citation (examination)  
JP 3192551 B2 20010730

Cited by  
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**EP 07740198 A 20070322**; CN 200780000725 A 20070322; JP 2006080497 A 20060323; JP 2007056760 W 20070322; KR 20077030354 A 20071226; US 99230207 A 20070322