

Title (en)
VIBRATOR, BUCKET AND VIBRATION METHOD

Title (de)
VIBRATOR, EIMER UND VIBRATIONSVERFAHREN

Title (fr)
VIBREUR, AUGE ET PROCÉDÉ DE VIBRATION

Publication
EP 2951358 A4 20161012 (EN)

Application
EP 14745988 A 20140122

Priority
• FI 20135100 A 20130201
• FI 2014050048 W 20140122

Abstract (en)
[origin: WO2014118429A1] The invention relates to a vibrator, bucket, and vibration method. The vibrator (16) comprises a rotation device (18) which is arranged to rotate (P) a rotating axle (19) and at least one vibrator element (17) arranged on it. The vibrator element comprises an outer surface that has different distances (R) from the rotating axle. The outer surface of the vibrator element is in contact with a mating surface (20). When the vibrator element is rotated, vibrating motion V is generated.

IPC 8 full level
E02F 3/40 (2006.01); **B06B 1/16** (2006.01); **B07B 1/28** (2006.01)

CPC (source: EP FI)
B06B 1/16 (2013.01 - EP); **B07B 1/12** (2013.01 - EP); **B07B 1/28** (2013.01 - EP); **B07B 1/286** (2013.01 - FI); **E02F 3/405** (2013.01 - EP FI); **E02F 3/407** (2013.01 - EP); **E02F 7/06** (2013.01 - EP)

Citation (search report)
• [XY] US 2012067659 A1 20120322 - OGURA HIDEO [JP]
• [A] JP H0978624 A 19970325 - MARUYAMA MITSURU
• [A] KR 20100024713 A 20100308 - CHIAK ENVIRONMENT INDUSTRY CO [KR]
• [A] JP 2005016230 A 20050120 - KAWANA MASAMI
• [A] JP H10266255 A 19981006 - JIYAKUTEI ENG KK
• [A] JP H08284196 A 19961029 - MASCHFAB LUBO BV [NL]
• [YA] WO 9012929 A1 19901101 - JONSSON TORD [SE]
• [A] US 5002656 A 19910326 - JOHANSSON ARNE H V [SE]
• See references of WO 2014118429A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2014118429 A1 20140807; EP 2951358 A1 20151209; EP 2951358 A4 20161012; EP 2951358 B1 20180718; FI 124431 B 20140829; FI 20135100 A 20140802

DOCDB simple family (application)
FI 2014050048 W 20140122; EP 14745988 A 20140122; FI 20135100 A 20130201