

Title (en)  
VIBRATING SCREEN, ESPECIALLY WITH SLOTTED SIEVE, AND METHOD FOR CONTROLLING THE OPERATION OF THE SCREEN,  
ESPECIALLY WITH SLOTTED SIEVE

Title (de)  
SCHWINGSIEB, INSBESONDERE MIT EINEM SPALTSIEB, UND VERFAHREN ZUR STEUERUNG DER OPERATION DES SIEBS,  
INSBESONDERE MIT EINEM SPALTSIEB

Title (fr)  
ÉCRAN VIBRANT, EN PARTICULIER AVEC UN TAMIS À FENTES ET PROCÉDÉ PERMETTANT DE COMMANDER LE FONCTIONNEMENT DE  
L'ÉCRAN, EN PARTICULIER AVEC UN TAMIS À FENTES

Publication  
**EP 3842158 A1 20210630 (EN)**

Application  
**EP 20214707 A 20201216**

Priority  
PL 43236919 A 20191223

Abstract (en)  
The vibrating screen, especially with a slotted sieve, is characterized in that the inverters (5) have a system for controlling the phase angle of vibrator (4) orientation, so that in the operation mode with the phase angle other than zero, the exciting force (W), being the resultant force from the forces (F) of action of the vibrators (4), acts in a plane ( $x_{<sub>c</sub>}$ ,  $z_{<sub>c</sub>}$ ) defined by a central axis ( $x_{<sub>c</sub>}$ ) perpendicular to the plane of symmetry ( $\pi$ ) of the screen and by a central axis ( $z_{<sub>c</sub>}$ ) inclined at an angle ( $\alpha$ ) to the sieve (2) deck, with the direction of the latter being defined by the centre of gravity (C) of the screen and a point (J) lying in the plane of symmetry ( $\pi$ ) of the screen, the point being the centre of the section connecting the axes of the vibrators (4). The method for controlling the operation of the screen is characterized in that additionally, by controlling the phase angle of vibrator (4) orientation, the direction of action of the resultant force (W) is changed such that said direction does not run in the plane of symmetry ( $\pi$ ) of the screen and as a result, angular vibrations ( $\beta$ ) of the screen are induced in the plane ( $x_{<sub>c</sub>}$ ,  $x_{<sub>c</sub>}$ ).

IPC 8 full level  
**B07B 1/42** (2006.01); **B07B 1/28** (2006.01); **B07B 1/12** (2006.01)

CPC (source: EP)  
**B07B 1/282** (2013.01); **B07B 1/42** (2013.01); **B07B 1/12** (2013.01)

Citation (applicant)  
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• PL 167019 B1 19950731 - POLITECHNIKA LODZKA [PL]  
• US 6513664 B1 20030204 - LOGAN GRADY [US], et al  
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Citation (search report)  
• [XII] US 2011060469 A1 20110310 - BURKHARD ALAN WAYNE [US]  
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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

Designated extension state (EPC)  
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**EP 3842158 A1 20210630**; PL 241072 B1 20220801; PL 432369 A1 20210628

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