

Title (en)
STIRRING DEVICE COMPRISING A STIRRING TOOL AND A DRIVE MOTOR

Title (de)
RÜHRGERÄT MIT EINEM RÜHRWERKZEUG UND MIT EINEM ANTRIEBSMOTOR

Title (fr)
AGITATEUR DOTÉ D'UN MÉCANISME D'AGITATION ET D'UN MOTEUR D'ENTRAÎNEMENT

Publication
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Application
EP 12712957 A 20120328

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Abstract (en)
[origin: WO2012163444A1] The invention relates to a stirring device (1) that comprises a stirring tool which can be introduced into a mass or liquid that is to be stirred, a drive motor (4) that drives said stirring tool, a housing (5) enclosing said drive motor (4) and a fastening point (6) for securing said stirring device in a working position. The stirring device (1) has at least one sensor (11) for detecting imbalances which preferably is linked or connected to the open- and closed-loop control systems of the drive motor (4), and which can switch off said drive motor (4) or change the speed thereof in the event of undesired or dangerous oscillations or vibrations.

IPC 8 full level
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Citation (opposition)
Opponent : Heidolph Instruments GmbH & Co. KG
• EP 2153887 A2 20100217 - HANS HEIDOLPH GMBH & CO KG [DE]
• DE 19735539 A1 19990218 - KONIETZKO ALBRECHT [DE]
• US 2002154568 A1 20021024 - RENFRO CHARLES K [US]
• GB 2122396 A 19840111 - EXXON RESEARCH ENGINEERING CO
• US 4606648 A 19860819 - COYLE CHANDLER K [US], et al
• US 4142804 A 19790306 - CROCKER ZENAS
• US 6379109 B1 20020430 - SENIOR JR ROY F [US], et al
• EP 0124383 A1 19841107 - BRITISH HYDROMECHANICS [GB]
• GB 2139354 A 19841107 - BRITISH HYDROMECHANICS
• US 2008056059 A1 20080306 - MANERA MICHAEL D [US], et al
• DE 102006011370 A1 20070920 - EPPENDORF AG [DE]
• WO 03095956 A2 20031120 - I FOR T GMBH [DE], et al
• US 5396796 A 19950314 - KOTANI TSUTOMU [JP], et al
• WO 0070338 A1 20001123 - HONEYWELL INC [US]
• US 2009211357 A1 20090827 - PINTO GINO AMARO [US], et al
• US 2009283603 A1 20091119 - PETERSON JEREMY W [US], et al
• EP 2241270 A2 20101020 - STRYKER CORP [US]
• US 2008150717 A1 20080626 - GUILLEMOT ERIC ANDRE GEORGES [FR], et al
• DE 19539633 C2 19980604 - HERAEUS INSTR GMBH & CO KG [DE]
• DE 102006018325 A1 20071025 - FRITSCH GMBH [DE]
• EP 1834559 A1 20070919 - SEB SA [FR]
• DE 19701551 C1 19980806 - FRESENIUS AG [DE]
• US 4491019 A 19850101 - WICKI GERHARD [CH], et al
• "PREISLISTE Produktgruppe RÜHREN", BESTELLKATALOG DER HEIDOLPH-ELEKTRO KG, 15 March 1973 (1973-03-15), XP055288822

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