

Title (en)  
HYDROMECHANICALLY DRIVEN MASSAGE AND HYDROTHERAPEUTIC APPARATUS

Publication  
**EP 0060196 A3 19830817 (FR)**

Application  
**EP 82400392 A 19820305**

Priority  
FR 8104739 A 19810310

Abstract (en)  
[origin: US4432355A] A massaging device designed for hydrotherapy is provided with an hydromechanical drive capable of operating effectively in any position, even when the device is held in a vertical position or upside down. The device comprises a paddle wheel (6) energized by water flowing from the mains through a duct (3) converging towards a distributor (5) from which the water flows tangentially to the wheel (6). Beyond the distributor, the water stream is smoothly guided by a gradually diverging arcuate side wall (16) towards an exhaust channel (18) lined by a concave wall (20) for directing the exhaust jet towards the massaging balls (12) which are freely rotating on studs (13) fixed on the tip of a drive shaft (11). This drive shaft is driven by the turbine wheel through a reducing gear enclosed in a water-tight housing (25), separated from the water circuit. The smooth guiding of the water stream by arcuate walls 16 and 20 ensures that this stream retains sufficient kinetic energy for forming a strong exhaust jet appropriate for hydrotherapy, irrespective of the position of the massaging device.

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CPC (source: EP US)  
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Citation (search report)  
• [A] US 2258931 A 19411014 - HEER FRANCIS C, et al  
• [A] US 2641256 A 19530609 - SCHMIDT FRIEDA W  
• [A] US 1899208 A 19330228 - HAYES MURPHY DANIEL  
• [A] US 4228558 A 19801021 - ZHADANOV SEMEN  
• [A] DE 2634772 A1 19780209 - VOSS ARMATUREN  
• [A] CH 459143 A 19680715 - SONDEREGGER WALTER [CH]

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