

Title (en)

ELECTRICALLY POWERED SURGICAL IRRIGATOR

Title (de)

ELEKTRISCH BETRIEBENER CHIRURGISCHER IRRIGATOR

Title (fr)

IRRIGATEUR CHIRURGICAL ELECTRIQUE

Publication

EP 1318846 A2 20030618 (EN)

Application

EP 01973747 A 20010920

Priority

- US 0142237 W 20010920
- US 66817800 A 20000922

Abstract (en)

[origin: WO224253A2] A surgical irrigator comprises a pumping unit connected to a handpiece by means of elongated irrigation tubing. The pumping unit includes an impeller, batteries and a battery powered motor to drive the impeller. The handpiece includes an irrigation valve which, when depressed, opens the valve and permits irrigation liquid to flow to the surgical site. A flow sensing device is positioned at the outlet of the pumping unit. When the irrigation valve is opened, liquid flow through the flow sensing device under the influence of gravity causes a float to move with the liquid. A light source provides a light beam which is interrupted by movement of the float. This is detected by a photosensor which generates a signal to turn the motor on, causing the pump to operate. A battery isolator switch is provided which interrupts the circuit between the batteries and motor so that the device cannot be turned on during transit and storage. A one-way valve connected between the source of irrigation liquid and pump maintains the liquid in the irrigator at a pressure above atmospheric when the irrigation valve is closed. The pumping unit includes an inlet which is connected to one end of a short flexible tube, the other end of which is connected to a standard spike for connecting the pumping unit to an irrigation bag. The pumping unit also includes clips which support the pumping unit on IV pole or the like. The spike is coated with silicone which makes it relatively easy to connect the pumping unit to the irrigation bag.

IPC 1-7

A61M 1/00

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 0224253A2

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