Title (en)

VACUUM MIXING SYSTEM AND METHOD FOR MIXING OF POLYMETHYLMETHACRYLATE BONE CEMENT

Title (de)

VAKUUMMISCHSYSTEM UND VERFAHREN ZUM MISCHEN VON POLYMETHYLMETHACRYLAT-KNOCHENZEMENT

Title (fr)

SYSTÈME DE MÉLANGE SOUS VIDE ET PROCÉDÉ DE MÉLANGE DE CIMENT OSSEUX EN POLYMÉTHACRYLATE DE MÉTHYLE

Publication

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Application

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Priority

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Abstract (en)

[origin: CA2893275A1] The invention relates to a vacuum mixing system for the mixing of polymethylmethacrylate bone cement, comprising at least one cartridge (4) having an evacuable internal space for mixing of the bone cement, a pump (18) for generating a negative pressure, and a connecting conduit (12) connecting the internal space of the at least one cartridge (4) to the pump (18) for generating a negative pressure, whereby the vacuum mixing system comprises an integrated energy reservoir (28) for driving the pump (18) that is or can be connected to the pump (18) and has energy for at least one pumping process of the pump (18) stored in it, whereby a negative pressure can be generated by means of the pump (18) during the pumping process by consuming energy from the integrated energy reservoir (28) such that the negative pressure can be used to evacuate gas from the internal space of the at least one cartridge (4) through the connecting conduit (12). The invention also relates to a method for the mixing of polymethylmethacrylate bone cement in an internal space of a cartridge (4) of a vacuum mixing system, in which energy stored in an energy reservoir (28) that is integrated into the vacuum mixing system is used to drive a pump (18) of the vacuum mixing system, whereby the pump (18) thus driven is used to evacuate the internal space of the cartridge (4) and to mix a bone cement in the internal space of the cartridge (4).

IPC 8 full level

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