

Title (en)

GRAVITY FILTER FILTERING DEVICE FOR SOFTENING AND PURIFYING DRINKING WATER

Title (de)

FILTERVORRICHTUNG FÜR SCHWERKRAFTFILTER ZUM ERWEICHEN UND REINIGEN VON TRINKWASSER

Title (fr)

DISPOSITIF DE FILTRATION À FILTRE GRAVITAIRE POUR ADOUCISSEMENT ET PURIFICATION D'EAU POTABLE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2021014261A1] The invention is intended for softening and purifying drinking water and can be used to improve the quality of drinking water purification in household pitcher-type filters. A gravity filter filtering device is proposed for the softening and purification of drinking water, which comprises a fixing system for fixing the filtering device in the filter funnel, which has openings for inlet of water to be treated and outlet of air, a filter element made of porous block material in the form of a hollow vertical vessel having a porous or hermetically sealed bottom, and arranged therein, a layer of ion-exchange material and a treatment water flow distributor comprising a fixing element, wherein the layer of ion-exchange material is disposed between an inner surface of the filter element and the treatment water flow distributor which is in the form of a vertical or horizontal body having openings of a size that are smaller than the particle size of the ion-exchange material. The porous block material of the filter element is obtained by compression under heating of a mixture of powdered components comprising activated carbon particles and a polymer binder. The system for fixing the filtering device is connected to the filter element in a hermetically sealing manner. The technical result is a simplified design, while providing increased capacity for stable softening of water and while maintaining highly effective water purification.

IPC 8 full level

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CPC (source: EP RU)

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Citation (search report)

See references of WO 2021014261A1

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