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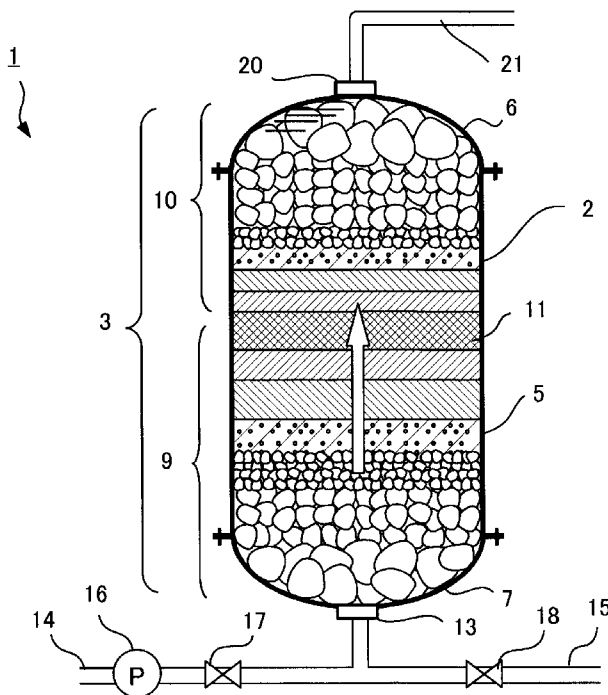
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— 国際調査報告 (条約第21条(3))

(54) Title: UP-FLOW FILTRATION DEVICE CHARACTERIZED BY METHOD FOR STACKING FILTER MATERIALS

(54) 発明の名称: ろ過材の積層方法に特徴を有する上向きろ過装置

[図1]



(57) Abstract: [Problem] To provide a filtration device having a filter material that is less likely to clog, the filtration device being capable of efficiently filtering a large quantity of water to be filtered and of easily cleaning the filter material even when the filter material clogs. [Solution] An up-flow filtration device (1) is configured from a pressure vessel (2) and a filter material (3) comprising gravel, filter sand, and particles. The filter material (3) is configured from a filtration section (9) in which the grains in the filter material (3) are stacked such that the diameter of the grains becomes gradually smaller from bottom to top, and a filter sand outflow prevention section (10) disposed on the filtration section (9) and in which the grains in the filter material (3) are stacked such that the diameter of the grains becomes gradually larger from bottom to top. The pressure vessel (2) is filled with the filter material (3) up to the ceiling. Alternatively, the filter material (3) is prevented from rising as a consequence of the ammonium chloride outflow prevention section (10) being forcibly pressed down on from above by means of a predetermined pressing plate (26) or weight. Raw water is pumped from the bottom of the pressure vessel (2) at a pressure of 0.05 MPa or more.

(57) 要約:

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