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(54) Title: SOLID-STATE COMPRESSOR AND METHOD FOR PROVIDING COUNTER PRESSURE ON A SOLID-STATE COMPRESSOR CELL STACK

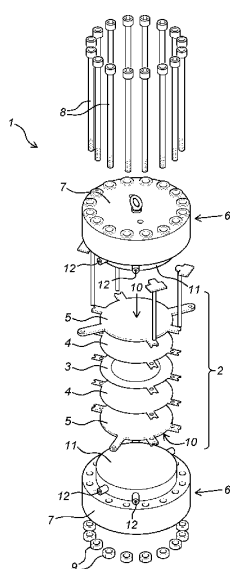


Fig. 2

(57) Abstract: The invention relates to a solid-state compressor for electrochemically compressing a fluid, comprising: a compressor cell stack, comprising at least one compressor cell having a membrane electrode assembly sandwiched between two cell plates, an enclosure, clamping the compressor cell stack at opposing sides thereof, and at least one contact body, interposed between the compressor cell stack and the enclosure and contacting an outer surface of the compressor cell stack, wherein a space is enclosed between the enclosure and the contact body, which space is configured to contain a hydraulic fluid under pressure. The invention further relates to a method for operating such a solid-state compressor.

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