

Title (en)
FILTER DEVICE

Title (de)
FILTERGERÄT

Title (fr)
APPAREIL DE FILTRATION

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Application
EP 12759122 A 20120913

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Abstract (en)
[origin: WO2013037906A1] The present invention relates to a filter device (1) for filtering liquid fuels for internal combustion engines, particularly for large piston engines such as diesel engines for ships, the device comprising a filter unit having at least one filter body that separates a raw chamber from a clean chamber in a filter space, a back-flushing unit for back-flushing the filter body with purified fuel or foreign medium, and a compensation unit (4) having a compensation piston (22) arranged with an adjustable stroke in a compensation cylinder chamber (23) connected to and allowing communication with the clean chamber, wherein the compensation piston (22) in the compensation cylinder chamber (23) separates a dirt chamber (25) connected to and communicating with the raw chamber from a purified fuel storage chamber connected to and allowing communication with the clean chamber (28). Increased operating security results if the compensation unit (4) comprises an accumulator piston (42) that is fixedly connected via a piston rod (43) to the compensation piston (22) which is arranged with adjustable stroke in a storage cylinder chamber (44) and which in the storage cylinder chamber (44) delimits a working chamber (45) fluidically separated from the storage chamber (26), wherein the compensation unit (4) comprises a pressure accumulator (49), of which the accumulator chamber (50) is connected in a way that allows communication to the working chamber (45).

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