

Title (en)
LEAKAGE DETECTION DEVICE FOR A DOUBLE WALLED FLUID PIPE

Title (de)
LECKDETEKTIONSVORRICHTUNG FÜR DOPPELWANDIGE ROHRLEITUNG

Title (fr)
DISPOSITIF DE DÉTECTION DE FUITE POUR UN TUYAU DE FLUIDE À DOUBLE PAROI

Publication
EP 3128167 A1 20170208 (EN)

Application
EP 15179456 A 20150803

Priority
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Abstract (en)
The invention relates to a leakage detection device (4) for a double walled fluid pipe (1) having a drainage jacket (3) surrounding a high pressure pipe (2), comprising: - at least one fluid inlet duct (5) for connection to the drainage jacket (3) of the fluid pipe (1); - at least one fluid outlet duct (6) for connection to a leakage conduit; - at least one valve device (7) for control of the flow of leakage fluid through the fluid outlet duct (6), the valve device (7) having a spring loaded valve body (8) which can be shifted against a force of a reset spring (9) by the pressure of the drainage fluid entering the fluid inlet duct (5), wherein a first end position of the valve body (8) corresponds to a minimal leakage amount and a second end position corresponds to maximal leakage amount of the high pressure pipe. The valve body (8) comprises at least one throttle passage (10) for flow connection of the fluid inlet duct (5) and the fluid outlet duct (6), wherein in each shifting position of the valve body (8) the throttle passage (10) is flow connected to the fluid inlet duct (5) and to the fluid outlet duct (6). The leakage detection device 4 enables fail-safe function independent of the installation position and the mounting orientation.

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Citation (applicant)
• EP 2297448 B1 20120125 - WAERTSILAE FINLAND OY [FI]
• WO 2009003717 A1 20090108 - CATERPILLAR MOTOREN GMBH & CO [DE], et al

Citation (search report)
• [A] WO 2005038232 A1 20050428 - WAERTSILAE FINLAND OY [FI], et al
• [AD] EP 2297448 B1 20120125 - WAERTSILAE FINLAND OY [FI]
• [A] DE 102009045894 A1 20110428 - BOSCH GMBH ROBERT [DE]

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