

Title (en)
Suspended particle detector.

Title (de)
Detektor für suspendierte Teilchen.

Title (fr)
Détecteur pour des particules suspendues.

Publication
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Application
EP 83304076 A 19830713

Priority
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Abstract (en)
A suspended particle detector includes a housing (1,2) containing a radiation source (3) which shines radiation across the interior of the housing (1,2), a first radiation sensor (5) arranged to receive radiation scattered from the wall (1) of the housing (1,2) and radiation scattered from particles suspended in the housing (1,2) and to produce a first signal indicative of the total intensity of radiation incident on it. A second sensor (4) is arranged to produce a second signal indicative of the intensity of the radiation source (3). The detector also includes a signal combining circuit arranged to combine the two signals in opposition to produce a composite signal and the detector is constructed so that the composite signal has a first polarity when the density of suspended particles in the housing is less than a predetermined pressure or value and the opposite polarity when the said density is greater than the threshold value. A logic unit is arranged to detect when the polarity of the composite signal reverses and then to produce an alarm signal.

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G08B 17/10

IPC 8 full level
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CPC (source: EP)
G08B 17/107 (2013.01); **G08B 17/113** (2013.01)

Citation (search report)
• [X] US 3723747 A 19730327 - STEELE D
• [Y] DE 2856259 B1 19791220 - CERBERUS AG
• [A] EP 0015007 A1 19800903 - HEKATRON GMBH [DE]

Cited by
EP2093733A1; EP0547415A1; EP0463795A1; US5231378A; US8546740B2; WO2009103668A1; WO2009103777A1

Designated contracting state (EPC)
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