

Title (en)
PHASE FRACTION MEASUREMENT USING CONTINUOUSLY AND ADJUSTED LIGHT SOURCE

Title (de)
PHASENFRAKTIONSMESSUNG MIT KONTINUIERLICHER UND ANGEPASSTER LICHTQUELLE

Title (fr)
MESURE DE FRACTION DE PHASE AU MOYEN D'UNE SOURCE DE LUMIÈRE AJUSTÉE

Publication
EP 3475684 A4 20200219 (EN)

Application
EP 17820956 A 20170622

Priority

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- US 201615194853 A 20160628
- US 2017038642 W 20170622

Abstract (en)
[origin: WO2018005213A1] An apparatus includes a pipe through which a multiphase fluid flows, with a transparent window structure formed in the pipe. A collimated light source emits light through the transparent window structure into the pipe having a wavelength at which a component of a desired phase of the multiphase fluid is absorptive. A photodetector is positioned such that the emitted light passes through the multiphase fluid in the pipe to impinge upon the photodetector. The photodetector has an actual dynamic range for collimated light detection. Processing circuitry is configured to adjust a power of the collimated light source dependent upon an output level of the photodetector so as to cause measurement of the emitted light over an effective dynamic range greater than the actual dynamic range. Properties of the multiphase fluid are determined as a function of the measured emitted light.

IPC 8 full level
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Citation (search report)

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