

Title (en)

LIQUID LEVEL SENSING SYSTEM WITH LIQUID IDENTIFICATION CAPABILITY

Title (de)

FLÜSSIGKEITSSTAND-MESSSYSTEM MIT FLÜSSIGKEITSIDENTIFIKATIONSFÄHIGKEIT

Title (fr)

SYSTÈME DE DÉTECTION DE NIVEAU DE LIQUIDE AVEC CAPACITÉ D IDENTIFICATION DE LIQUIDE

Publication

**EP 1913345 A4 20090812 (EN)**

Application

**EP 05777498 A 20050728**

Priority

US 2005026856 W 20050728

Abstract (en)

[origin: WO2007018513A1] The present liquid depth sensing system 10 with its liquid identification capability provides an economical device which may be installed in a multitude of different applications to perform multiple quantity measurement and detection functions. The present system 10 includes a miniaturized piezoelectric pneumatic pump 30, sized and adjusted to produce a consistent stream of bubbles from the outlet end 28 of the dip tube 26 in the purge system of the present invention. The small variations in pneumatic pressure in the system 10 due to the cycling of each bubble working through the surface tension and viscosity of the liquid 34 as the bubble 36 leaves the outlet end 28 of the tube 26 are detected and converted to a voltage signal which is used to identify the liquid 34 at the outlet end 28 of the tube 26. The present system 10 is extremely valuable for identifying contaminants in the tank 12, as well as for measuring the liquid 34 quantity in the tank 12.

IPC 8 full level

**G01F 23/00** (2006.01); **G01F 23/16** (2006.01)

CPC (source: EP)

**G01F 23/168** (2013.01)

Citation (search report)

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- [A] US 5426976 A 19950627 - MCHARDY JOHN [US], et al
- [A] EP 1063339 A1 20001227 - MIELE & CIE [DE]
- [A] WO 0229367 A2 20020411 - DIRECTECH INTERNAT LTD [GB], et al
- See references of WO 2007018513A1

Designated contracting state (EPC)

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