

Title (en)  
LEVEL DIFFERENCE MEASUREMENT APPARATUS

Title (de)  
GERÄT ZUM MESSEN VON HÖHENDIFFERENZEN

Title (fr)  
APPAREIL DE MESURE DE DIFFERENCES DE NIVEAU

Publication  
**EP 0797756 A1 19971001 (DE)**

Application  
**EP 95902752 A 19941212**

Priority  
DE 9401472 W 19941212

Abstract (en)  
[origin: WO9618867A1] The object of the invention is to create a one-man operated level difference measurement apparatus to replace the usual sensitive optical apparatus. It should also supply sufficiently precise measurement results even in poor local visibility conditions, under variable temperatures and pressures. For that purpose, a modified automatic hose level has a reference reservoir (1) to be placed in the measurement area, a liquid-filled connecting hose (6) and a measurement head (7). The storage reservoir (1) is designed as a flat foil reservoir (10) that exposes the measurement liquid (5) to the local atmospheric pressure. The measurement head (7) has not only pressure sensors (14), display electronics (11), signal generator (15) and ruler (16) but also temperature and time measurement devices (8, 9), a correction reservoir (12) and an electronic filter (13) to regularly calibrate the measurement apparatus and ensure sufficiently precise measurement results. This level difference measurement apparatus is advantageously used for example in the construction industry and allows sufficiently precise level difference measurements to be economically carried out even in poor visibility and rough building site conditions.

IPC 1-7  
**G01C 5/04**; E04F 21/18

IPC 8 full level  
**E04F 21/18** (2006.01); **G01C 5/04** (2006.01)

CPC (source: EP)  
**E04F 21/1838** (2013.01); **G01C 5/04** (2013.01)

Citation (search report)  
See references of WO 9618867A1

Designated contracting state (EPC)  
AT CH DE FR GB LI

DOCDB simple family (publication)  
**WO 9618867 A1 19960620**; EP 0797756 A1 19971001

DOCDB simple family (application)  
**DE 9401472 W 19941212**; EP 95902752 A 19941212