

Title (en)
METHOD FOR MEASURING THE WATER LEVEL OF A BODY OF WATER

Title (de)
VERFAHREN ZUR MESSUNG DES WASSERSTANDS EINES GEWÄSSERS

Title (fr)
PROCÉDÉ DE MESURE DE LA PROFONDEUR D'UNE NAPPE D'EAU

Publication
EP 2531822 A2 20121212 (DE)

Application
EP 11701634 A 20110113

Priority
• DE 102010001440 A 20100201
• EP 2011050372 W 20110113

Abstract (en)
[origin: CA2787896A1] The invention relates to a method for measuring the water level of a body of water. For this purpose, a reflector (1, 101, 201, 301, 401, 501) is used, which comprises a number of reflection surfaces (1a, 1b) for reflecting electromagnetic radiation in a predetermined wavelength region and which is provided in or at the body of water such that a corner reflector is formed by the water surface (W) of the body of water and one or more reflection surfaces (1a, 1b) of the reflector (1, 101, 201, 301, 401, 501). Within the scope of the method, electromagnetic radiation in the predetermined wavelength region that is emitted by a radiation device (3) located above the body of water shines on the reflector (1, 101, 201, 301, 401, 501) such that the incident radiation is reflected on the corner reflector on the basis of multiple reflections, taking into consideration the water surface (W). The distance between the radiation device (2) and reflection center of the corner reflector is measured over a propagation time of the emitted and reflected radiation, and the water level (W) of the body of water is determined on the basis thereof.

IPC 8 full level
G01F 23/00 (2006.01)

CPC (source: EP)
G01F 23/284 (2013.01); **G01S 13/88** (2013.01); **H01Q 1/225** (2013.01); **H01Q 1/28** (2013.01); **H01Q 1/34** (2013.01); **H01Q 15/18** (2013.01)

Citation (search report)
See references of WO 2011092056A2

Citation (examination)
• DE 889617 C 19530910 - GASACCUMULATOR SVENSKA AB
• JP 2001177335 A 20010629 - TOOTEKKUSU KK

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
DE 102010001440 A1 20110804; **DE 102010001440 B4 20140116**; CA 2787896 A1 20110804; CA 2787896 C 20150721;
EP 2531822 A2 20121212; WO 2011092056 A2 20110804; WO 2011092056 A3 20111013

DOCDB simple family (application)
DE 102010001440 A 20100201; CA 2787896 A 20110113; EP 11701634 A 20110113; EP 2011050372 W 20110113