

Title (en)
RADIO-FREQUENCY GENERATING UNIT

Title (de)
HOCHFREQUENZ-ERZEUGUNGSEINHEIT

Title (fr)
UNITÉ DE PRODUCTION HAUTE FRÉQUENCE

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Application
EP 18717034 A 20180410

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Abstract (en)
[origin: WO2018219534A1] The invention relates to a radio-frequency generating unit (11) for an FMCW radar-based fill level measuring device (1) which according to the invention comprises the following components: a clock unit (111) for generating a clock signal (sClock), a digital switch mechanism (114) controlled by the clock signal (sClock) for generating a digital output signal (Sd), and a digital/analogue converter (115) which converts the digital output signal (Sd) of the digital switch mechanism (114) into an analogue radio-frequency signal (SHF). Due to this construction according to the invention, a radio-frequency generating unit (11) for an FMCW-based fill level measurement system can be produced which in particular functions without a voltage-controlled oscillator connected to a sensitive control loop, as is normally required in the prior art. This substantially reduces the circuit complexity, so that the radio-frequency generating unit (11) can be made very compact, if necessary as a single monolithically integrated circuit. With regard to the fill level measurement, the radio-frequency generating unit (11) according to the invention, because of the low-interference signal generation of the radio-frequency generating unit, allows the fill level (L) to be determined more precisely and more reliably.

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