

Title (en)  
HIGH DYNAMIC DEVICE FOR INTEGRATING AN ELECTRIC CURRENT

Title (de)  
VORRICHTUNG MIT HOHER DYNAMIK ZUR INTEGRATION EINES ELEKTRISCHEN STROMS

Title (fr)  
DISPOSITIF HAUTE DYNAMIQUE POUR L'INTEGRATION D'UN COURANT ELECTRIQUE

Publication  
**EP 3759814 A1 20210106 (FR)**

Application  
**EP 19706685 A 20190227**

Priority  
• FR 1851818 A 20180302  
• EP 2019054805 W 20190227

Abstract (en)  
[origin: WO2019166465A1] This device (100a) for integrating an electric current (I) received on an integration node (E) comprises: - an operational amplifier (62); - an integration capacitor (64); - a circuit (105a) for modifying an output voltage (V OUT ) of the operational amplifier performed by a load transfer circuit configured to be connected on said integration node and to transfer loads in said integration capacitor; - a comparison circuit (74) configured to initiate said modification circuit at least once during said integration duration (T int ); and - a storage circuit configured to store said number of initiations that occurred during said integration duration. The received electric current is computed as a function of said output voltage as well as of said number of initiations multiplied by said modification of said output voltage induced by said modification circuit.

IPC 8 full level  
**G01J 5/20** (2006.01); **H03F 3/00** (2006.01); **H03F 1/08** (2006.01); **H03F 3/185** (2006.01); **H03F 3/45** (2006.01); **H03F 3/70** (2006.01); **H03M 1/18** (2006.01); **H03M 1/52** (2006.01)

CPC (source: EP KR US)  
**G01J 5/20** (2013.01 - EP); **G01J 5/24** (2013.01 - EP KR US); **H03F 1/086** (2013.01 - EP KR US); **H03F 3/005** (2013.01 - EP KR US); **H03F 3/185** (2013.01 - EP KR); **H03F 3/45475** (2013.01 - EP KR); **H03F 3/45991** (2013.01 - EP KR); **H03F 3/70** (2013.01 - EP KR US); **H03M 1/181** (2013.01 - EP KR); **H03M 1/52** (2013.01 - EP KR); **G01J 2005/204** (2013.01 - EP KR); **H03F 2200/156** (2013.01 - EP KR); **H03F 2200/264** (2013.01 - EP KR US); **H03F 2200/78** (2013.01 - EP KR US)

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2019166465 A1 20190906**; CA 3089379 A1 20190906; CN 111656681 A 20200911; EP 3759814 A1 20210106; FR 3078596 A1 20190906; FR 3078596 B1 20200214; KR 102607038 B1 20231130; KR 20200123411 A 20201029; US 11867563 B2 20240109; US 2021072087 A1 20210311

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