Title (en)

SEQUENTIAL BURST-MODE AUTOMATIC GAIN/OFFSET CONTROL SYSTEM FOR TRANSIMPEDANCE AMPLIFIERS

Title (de)

SYSTEM ZUR SEQUENTIELLEN BURST-MODUS-STEUERUNG DER VERSTÄRKUNG/OFFSET FÜR TRANSIMPEDANZVERSTÄRKER

Title (fr)

SYSTÈME DE COMMANDE AUTOMATIQUE DE GAIN/DÉCALAGE SÉQUENTIEL EN MODE RAFALE POUR AMPLIFICATEURS DE TRANSIMPÉDANCE

Publication

EP 4256701 A1 20231011 (EN)

Application

EP 21762035 A 20210816

Priority

EP 2021072747 W 20210816

Abstract (en)

[origin: WO2023020680A1] Circuitry (400) for controlling the amplification of an input signal (408), the circuitry (400) comprising: an amplifier (401) for receiving an input signal (408) and being configured to amplify the input signal (408) to generate an amplified signal (409); a cascading series of N comparison blocks (403), C1, C2, … Cn-1, Cn, … CN, each comparison block (403), Cn, being for receiving a reset input signal (412) from a previous comparison block (403), Cn-1, and being configured to receive the amplified signal (409); wherein each comparison block (403) is further configured to control its state in dependence on the reset input signal (412) and the amplified signal (409). In this way, the control of each comparison block (403), and consequently the control of the amplifier (401), may be dependent on the reset signal (413) from the previous comparison block (403) in the cascading series of comparison blocks (403).

IPC 8 full level

H03F 3/45 (2006.01); **H03G 3/30** (2006.01); **H03M 1/00** (2006.01); **H03M 1/38** (2006.01); **H04B 1/22** (2006.01); **H04B 10/69** (2013.01)

CPC (source: EP)

H03F 3/45475 (2013.01); **H03G 3/3047** (2013.01); **H03G 3/3084** (2013.01); **H03M 1/002** (2013.01); **H03M 1/38** (2013.01); **H04B 1/22** (2013.01); **H04B 10/40** (2013.01); **H04B 10/6931** (2013.01); H03F 2203/45528 (2013.01)

Citation (search report)

See references of WO 2023020680A1

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2023020680 A1 20230223; EP 4256701 A1 20231011

DOCDB simple family (application)

EP 2021072747 W 20210816; EP 21762035 A 20210816