

Title (en)  
MICROPHONE PRE-AMPLIFIER WITH POLARIZATION VOLTAGE SUPPLY

Title (de)  
MIKROFONVORVERSTÄRKER MIT POLARISATIONSSPANNUNGSVERSORGUNG

Title (fr)  
PRÉAMPLIFICATEUR DE MICROPHONE AYANT UNE ALIMENTATION EN TENSION DE POLARISATION

Publication  
**EP 3454568 B1 20201028 (EN)**

Application  
**EP 17190512 A 20170912**

Priority  
EP 17190512 A 20170912

Abstract (en)  
[origin: EP3454568A1] A system (1) of at least one microphone (2) and a remote signal analyzer (3) connected to the microphone (2) with two wires (5, 6) to transmit an audio signal (U<sub>aud</sub>) back to the analyzer (3) and to receive a constant input current (I<sub>in</sub>) on one of the wires (5) from the analyzer (3), which microphone (2) comprises an acoustic sensor (7) and a pre-amplifier (9) powered with the constant input current (I<sub>in</sub>) to amplify the audio signal (U<sub>aud</sub>) from the acoustic sensor (7), wherein the microphone (2) comprises a polarization voltage supply (8) connected to the two wires (5, 6) to polarize the microphone (10), which polarization voltage supply (8) comprises: a transformation stage (11) to transform a partial part of the constant input current (I<sub>in</sub>) on the one wire (5) from the remote signal analyzer (3) into an output voltage (U<sub>stab</sub>) with a first voltage level and a voltage increaser stage (12) to increase the voltage level of the output voltage (U<sub>stab</sub>) into an increased output voltage (U<sub>high</sub>) with a second voltage level and a noise reduction stage (13) to provide a polarization voltage (U<sub>pol</sub>) to the acoustic sensor (7).

IPC 8 full level  
**H04R 1/04** (2006.01); **H04R 3/00** (2006.01); **H04R 1/08** (2006.01)

CPC (source: EP)  
**H04R 1/04** (2013.01); **H04R 3/00** (2013.01); **H04R 1/08** (2013.01); **H04R 2499/13** (2013.01)

Cited by  
EP4354728A1

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)  
**EP 3454568 A1 20190313**; **EP 3454568 B1 20201028**; DK 3454568 T3 20210111; PL 3454568 T3 20210504

DOCDB simple family (application)  
**EP 17190512 A 20170912**; DK 17190512 T 20170912; PL 17190512 T 20170912