

Title (en)  
DIFFERENTIAL AMPLIFIER

Title (de)  
DIFFERENZVERSTÄRKER

Title (fr)  
AMPLIFICATEUR DIFFÉRENTIEL

Publication  
**EP 4183044 A1 20230524 (EN)**

Application  
**EP 20746184 A 20200724**

Priority  
EP 2020070917 W 20200724

Abstract (en)  
[origin: WO2022017620A1] A differential amplifier (100A) includes an input stage (102). The input stage (102) includes a first input transistor and a second input transistor. The differential amplifier (100A) further includes a first capacitor coupled between the first input transistor and the second input transistor, and a second capacitor coupled between the second input transistor and the first input transistor, for cancelling out the parasitic capacitance of each input transistor at least partially. The differential amplifier (100A) further includes one or more cascode stages (116, 128). Each cascode stage (116, 128) includes a first and a second cascode transistor, where the first cascode stage (116) is connected in series with the input stage (102). The differential amplifier (100A) further includes a first inductor pair that is connected between the input stage (102) and the first cascode stage (116) or between the first cascode stage (116) and a subsequent cascode stage (128).

IPC 8 full level  
**H03F 3/08** (2006.01); **H03F 3/195** (2006.01); **H03F 3/24** (2006.01); **H03F 3/45** (2006.01)

CPC (source: EP)  
**H03F 3/087** (2013.01); **H03F 3/195** (2013.01); **H03F 3/245** (2013.01); **H03F 3/45089** (2013.01); **H03F 3/45475** (2013.01); **H03F 2200/451** (2013.01); **H03F 2203/45058** (2013.01); **H03F 2203/45311** (2013.01); **H03F 2203/45316** (2013.01); **H03F 2203/45318** (2013.01); **H03F 2203/45512** (2013.01)

Citation (search report)  
See references of WO 2022017620A1

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 2022017620 A1 20220127**; EP 4183044 A1 20230524

DOCDB simple family (application)  
**EP 2020070917 W 20200724**; EP 20746184 A 20200724