

Title (en)
AMPLIFIER CIRCUIT

Title (de)
VERSTÄRKERSCHALTUNG

Title (fr)
CIRCUIT D'AMPLIFICATION

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Application
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Abstract (en)
[origin: WO2006099993A1] The invention relates to an amplifier circuit for amplifying an input signal (i_{EIN}) with a vertically integrated cascode (10). Said cascode comprises: a collector semiconductor region (1) of a collector (C), a first base semiconductor region (2) pertaining to a first base (B1) and adjacent to the collector semiconductor region (1), a second base semiconductor region (4) pertaining to a second base (B2), an intermediate base semiconductor region (3) which is adjacent to both the first base semiconductor region (2) and the second base semiconductor region (4), and an emitter semiconductor region (5) pertaining to an emitter (E) and adjacent to the second base semiconductor region (4). According to the invention, a signal input (EIN) is connected to the second base (B2) and the first base (B1) is connected to the second base by means of a network (NW) in such a way that a small signal voltage (U_{Bl}) on the first base (B1) is coupled to a small signal voltage (U_{b2}) on the second base (B2) and/or a small signal current (i_{B2}) is coupled through the second base (B2).

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