

Title (en)
LOW-NOISE AMPLIFYING CIRCUIT

Title (de)
RAUSCHARME VERSTÄRKERSCHALTUNG

Title (fr)
CIRCUIT D'AMPLIFICATION A FAIBLE BRUIT

Publication
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Application
EP 02782431 A 20020619

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Abstract (en)
[origin: WO03005566A2] The invention relates to a low-noise amplifying circuit having an invertible amplification ratio. To this end, a parallel connection comprised of a first and of a second current path (3, 4) is provided between a high-frequency signal input and signal output (1, 2). The first current path (3) for amplifying signals comprises a transistor in a common base, and the second current path (4) for amplifying signals comprises a transistor in the common emitter (7) provided with an input impedance matching (25, 27). Due to the good noise characteristics and to the good linearity characteristics, the described low-noise amplifying circuit is suited for use in high-frequency receivers in which, due to a large dynamic range of the input signal, such as in the case of UMTS, an adaptive pre-amplification is still required before a frequency converter, i.e. in the high-frequency level.

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