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**(54) Title (EN):** ACTIVE CIRCULATOR

**(54) Title (FR):** CIRCULATEUR ACTIF

**(54) Title (JA):** アクティブサーキュレータ

**(57) Abstract:**

**(EN):** A bias current supply (30) connects a gate terminal of a second source ground transistor (3) to a drain terminal of a first source ground transistor (1), the bias current supply (30) outputting a bias current so that the mutual conductance of a first bias transistor (5) is fixed, and supplying the bias current to a cascode amplifier 10 and to a cascode current mirror circuit.

**(FR):** Une alimentation en courant de polarisation (30) connecte une borne de grille d'un second transistor de masse source (3) à une borne de drain d'un premier transistor de masse source (1), l'alimentation en courant de polarisation (30) délivrant un courant de polarisation de telle sorte que la conductance mutuelle d'un premier transistor de polarisation (5) est fixée, et fournissant le courant de polarisation à un amplificateur cascode 10 et à un circuit de miroir de courant cascode.

**(JA):** バイアス電流源(30)が、第二のソース接地トランジスタ(3)のゲート端子を、第一のソース接地トランジスタ(1)のドレイン端子に接続し、第一のバイアス用トランジスタ(5)の相互コンダクタンスが一定になるようにバイアス電流を出力して、カスコード増幅器(10)とカスコードカレントミラー回路にバイアス電流を供給する。

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European Patent Office (EPO) : AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR

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