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OPERATIONAL AMPLIFIER

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Title (fr)

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Application

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Abstract (en)

[origin: WO2007124895A1] An operational amplifier and use of an operational amplifier with a difference amplifier (A1, A2, A3, A4) which is linked to a first input (In₁₁, In₁₂, In₁₃, In₁₄) and to a second input (In₂₁ , In₂₂, In₂₃, In₂₄), and with a differential output stage (D1, D2, D3, D4) which is linked to the difference amplifier (A1, A2, A3, A4) and to a first output (O₂₁, O₂₂, O₂₃, O₂₄) and a second output (O₁₁, O₁₂, O₁₃, O₁₄), in which the differential output stage (D1, D2, D3, D4) has a first branch with two first transistors ([M_{P211}, M_{N211}], [M_{P221}, M_{N221}], [Q_{P231}, Q_{N231}], [Q_{P241}, Q_{N241}]), the drain and/or collector of which are linked to each other and to the first output (O₂₁, O₂₂, O₂₃, O₂₄), the differential output stage (D1, D2, D3, D4) has a second branch with two second transistors ([M_{P212}, M_{N212}], [M_{P222}, M_{N222}], [Q_{P232}, Q_{N232}], [Q_{P242}, Q_{N242}]), the drain and/or collector of which are linked to each other and to the second output (O₁₁, O₁₂, O₁₃, O₁₄), the first gates and/or the first bases of the two first transistors ([M_{P211}, M_{N211}], [M_{P221}, M_{N221}], [Q_{P231}, Q_{N231}], [Q_{P241}, Q_{N241}]) in the first branch are linked to each other and to a first output (O_{D11}, O_{D12}, O_{D13}, O_{D24}) of the difference amplifier (A1, A2, A3, A4), the second gates and/or the second bases of the two second transistors ([M_{P212}, M_{N212}], [M_{P222}, M_{N222}], [Q_{P232}, Q_{N232}], [Q_{P242}, Q_{N242}]) in the second branch are linked to each other and to a second output (O_{D21}, O_{D22}, O_{D23}, O_{D14}) of the difference amplifier (A1, A2, A3, A4), the differential output stage (D1, D2, D3, D4) has a constant-current source (CS₂₁, CS₂₂, CS₂₃, CS₂₄), which is linked to each branch in order to supply a current (I₂₁, I₂₂, I₂₃, I₂₄) through the branches.

IPC 8 full level

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