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## **Espacenet**

## Bibliographic data: WO9838774 (A2) — 1998-09-03

## LINE DRIVER WITH ADAPTIVE OUTPUT IMPEDANCE

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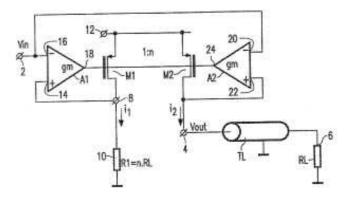
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## **Abstract of WO9838774 (A2)**

A line driver comprising a first transistor (M1), a first operational transconductance amplifier (A1) and a reference resistor (10) for converting an input voltage (Vin) to a first current (i1) through the first transistor (M1). A second current i2=n\*i1 flows through a second transistor (M2) which forms a 1:n current mirror with the first transistor (M1). The current i2 flows to a load (6), if so required via a



transmission line (TL). The impendance of the load (6) is equal to the characteristic impedance RL of the transmission line (TL). Thus, the impedance seen by the line driver is equal to RL. A second operational transconductance amplifier (A2) counteracts reflected signals in the output signal (Vout) caused by mismatch between the output impedance of the current mirror (M1, M2) and the impendance seen by the line driver.