



High Frequency Operational Amplifier

Tech ID: 21433 / UC Case 2009-257-0

BRIEF DESCRIPTION

A high frequency operational amplifier that exhibits precision gain at high frequencies and has record high bandwidth and linearity at a given operating power.

BACKGROUND

Since conventional operational amplifiers (op-amps) are unstable at high gains at high frequencies and may require complementary technology for implementation, there is a need for an op-amp that surmounts both of these obstacles in order to increase performance and decrease production costs.

DESCRIPTION

Researchers at the University of California, Santa Barbara have developed a high frequency operational amplifier. It exhibits precision gain at high frequencies and has record high bandwidth and linearity at a given operating power. Because it doesn't require complementary devices, production costs are decreased, and the op-amp tolerates a wide range of external input and output impedances. It is applicable in a wide range of both analog and digital electronics.

ADVANTAGES

- ▶ Precision gain at high frequencies
- ▶ Record high bandwidth at a given operating power
- ▶ Record high linearity at a given operating power
- ▶ Decreased production costs due to a design lacking the need for complementary technology
- ▶ High tolerances of external input and output impedances

APPLICATIONS

- ▶ Operational Amplifiers
- ▶ Analog and Digital Electronics

This technology is available for licensing. U.S. Patent No. 7,898,333.

PATENT STATUS

Country	Type	Number	Dated	Case
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CONTACT

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OTHER INFORMATION

KEYWORDS

Operational amplifier,
indtelecom

CATEGORIZED AS

- ▶ **Engineering**
- ▶ **Communications**
- ▶ Other

RELATED CASES

2009-257-0

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