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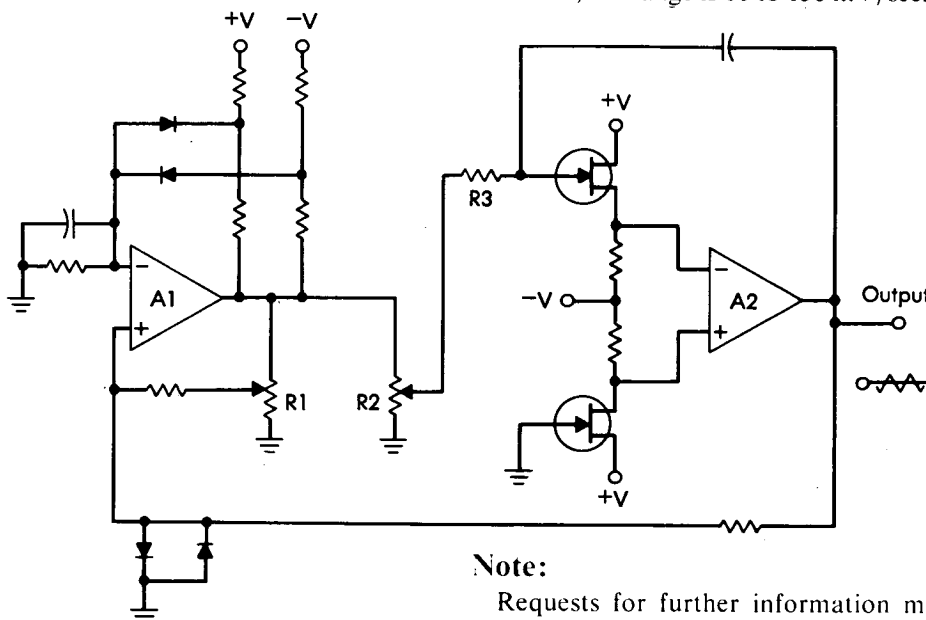
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Low-Frequency Triangular Wave Generator

The problem:

To generate a low-frequency triangular waveform, utilizing a minimum number of discrete circuit components.

the frequency over a range of 10 to 1. With resistor R3 set at 499 k Ω , the output slope can be varied over the range of 150 mV/sec to 2.5 V/sec. With R3 set at 22 M Ω , the range is 10 to 150 mV/sec.



The solution:

A combination of two integrated circuit operational amplifiers, one to produce a square wave and the other to integrate the square wave and generate a triangular wave.

How it's done:

The circuit (see fig.) uses two integrated circuit operational amplifiers to produce a symmetrical, subaudio triangular wave. The first amplifier, A1, generates a square wave, which is integrated by amplifier A2. The output amplitude may be varied over a range of 3 to 16 V peak-to-peak by adjusting potentiometer R1. Adjusting potentiometer R2 varies

Note:

Requests for further information may be directed to:

Technology Utilization Officer
Ames Research Center
Moffett Field, California 94035
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Patent status:

No patent action is contemplated by NASA.

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