

Title (en)

GAMMA CORRECTION CIRCUIT FOR USE IN IMAGE PROJECTORS.

Title (de)

GAMMA-KORREKTURSCHALTUNG ZUR VERWENDUNG IN BILDPROJEKTOREN.

Title (fr)

CIRCUIT DE CORRECTION GAMMA POUR PROJECTEURS D'IMAGES.

Publication

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Application

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Abstract (en)

[origin: WO9414276A1] Apparatus that implements a nonlinear transfer function (gain) that provides for gamma correction of nonlinear image projectors. The nonlinearity of the transfer function is designed to compensate for the nonlinear light modulator, such as a liquid crystal light valve and cathode ray tube combination, for example, that is used in the image projector. The gamma correction circuit comprises a plurality of amplifiers (30a, 30b, 30c) that include current sources coupled together to sum their output currents, and each amplifier is adapted to implement a predetermined transfer function, and provide differing levels of current. An optional output resistor (RC) may be employed to convert the composite output current into a corresponding output voltage. Each of the plurality of amplifiers typically comprises first and second emitter coupled pair transistors (31, 32) plus their associated current sources. This invention corrects the grey scale linearity of the image projector and produces "soft" breakpoints, creating a relatively smooth transfer function.

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