

ABSTRACT OF THE DISCLOSURE

INFRARED AUDIO SYSTEMS AND RELATED METHODS

A transmitter for transmitting audio signals via infrared light includes a first mounting board and a first plurality of narrow angle LED emitters and a first plurality of wide angle LED emitters attached to a front surface of the first mounting board. The first plurality of narrow angle LED emitters and first plurality of wide angle LED emitters are configured to emit a beam of infrared light having a wide portion and narrow portion, the wide portion being proximate the LED emitters and the narrow portion being distal to the LED emitters. An infrared audio system includes a transmitter and an expansion transmitter. The expansion transmitter may include a second plurality of narrow angle LED emitters and a second plurality of wide angle LED emitters. A method of making a transmitter includes attaching a plurality of narrow angle LED emitters and a plurality of wide angle LED emitters to a mounting board of a transmitter.

Figure 3.