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Lin

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(54) **LIGHTED FOOTWEAR**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 365 days.
This patent is subject to a terminal disclaimer.

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F21V 31/00 (2006.01)
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CPC **F21V 31/005** (2013.01); **A43B 3/001** (2013.01); **H05B 37/029** (2013.01); **H05B 37/0227** (2013.01)

(58) **Field of Classification Search**
CPC .. F21V 31/005; A43B 3/001; H05B 37/0227; H05B 37/029
See application file for complete search history.

(57) **ABSTRACT**

A display apparatus for lighted footwear, having a spring switch, a battery-powered integrated circuit sealingly encapsulated, a plurality of illuminators, and a wiring harness connecting the illuminators to points of the integrated circuit, the integrated circuit being configured for activating the illuminators in a sequential pattern that can include repeated activation cycles when the spring switch is subjected to an effective acceleration. The display apparatus preferably includes the battery being sealingly encapsulated together with the spring switch and the integrated circuit; an ON/OFF switch can be included for selectively producing a deep sleep state of the integrated circuit that is unresponsive to the spring switch. Also disclosed is footwear incorporating the display apparatus, wherein the encapsulated enclosure is located within a sole heel portion of the shoe, and the illuminators are distributed on the footwear for external view.

28 Claims, 6 Drawing Sheets

