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Date of Patent:

United States Patent [19]

Wu

[54] ILLUMINATING UMBRELLA HAVING RELIABLE CONNECTING WIRES FOR MULTIPLE FOLDS

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- [21] Appl. No.: 09/314,196
- [22] Filed: May 17, 1999

Related U.S. Application Data

- [63] Continuation-in-part of application No. 09/157,464, Sep. 18, 1998, Pat. No. 6,089,727.
- [51] Int. Cl.⁷ A45B 3/02

[56] **References Cited**

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Oct. 3, 2000

Primary Examiner—Stephen Husar

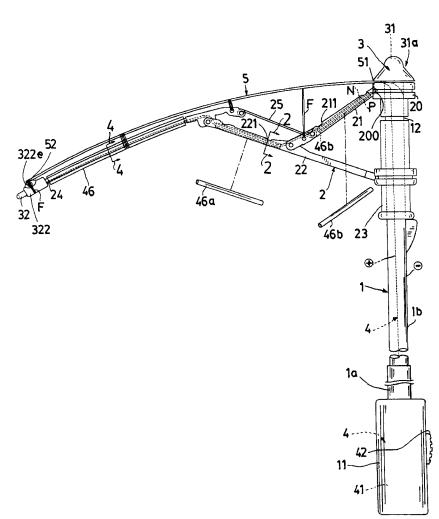
[57] ABSTRACT

[11]

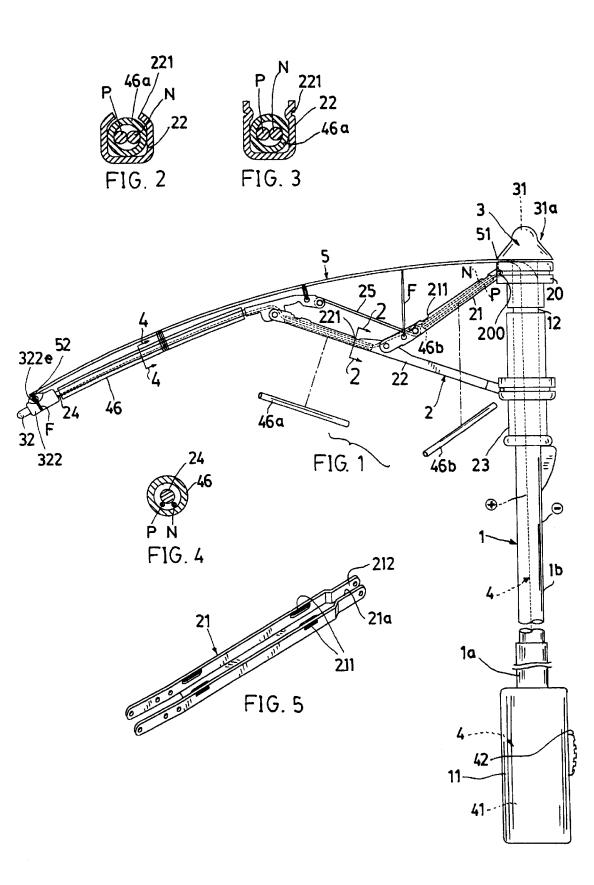
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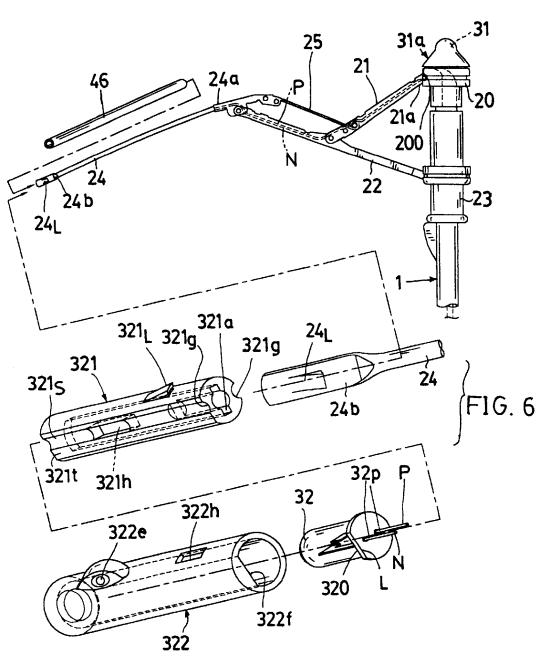
An illuminating umbrella includes a top illuminator fixed on a top end of an umbrella central shaft, a plurality of tip illuminators respectively fixed on a plurality of tips of the umbrella ribs of two or multiple folds; each illuminator having a positive wire electrically connected to a positive conducting ring secured on an upper notch of the central shaft, and having a negative wire electrically connected to a negative conducting ring formed on the upper notch of the central shaft, with the positive conducting ring electrically connected to a positive pole of a power source, and the negative conducting ring electrically connected to the negative pole of the power source through an on-off switch, having a safely protected and reliably connected electrical circuit provided among the illuminators and the power source; and a flasher connected between the power source and the illuminators for flashing the illuminators.

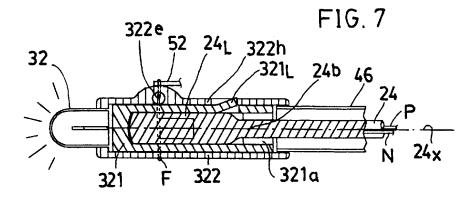
20 Claims, 14 Drawing Sheets

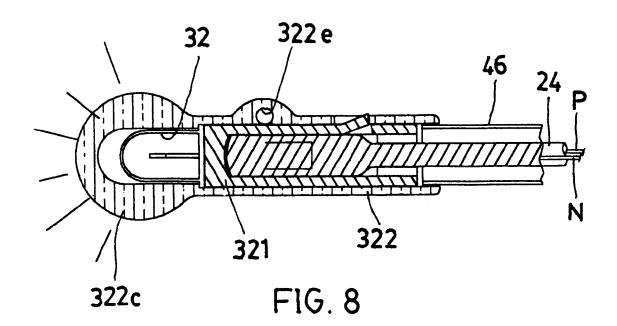


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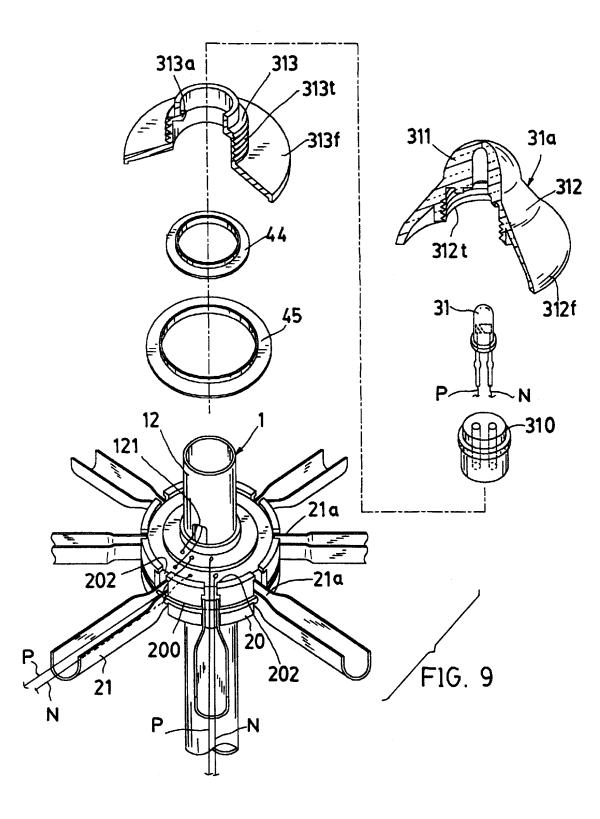








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