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United States Patent [19]

Wu

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 [45] **Date of Patent:** **Oct. 3, 2000**

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

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[57] **ABSTRACT**

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.

[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**

[52] **U.S. Cl.** **362/102; 135/910**

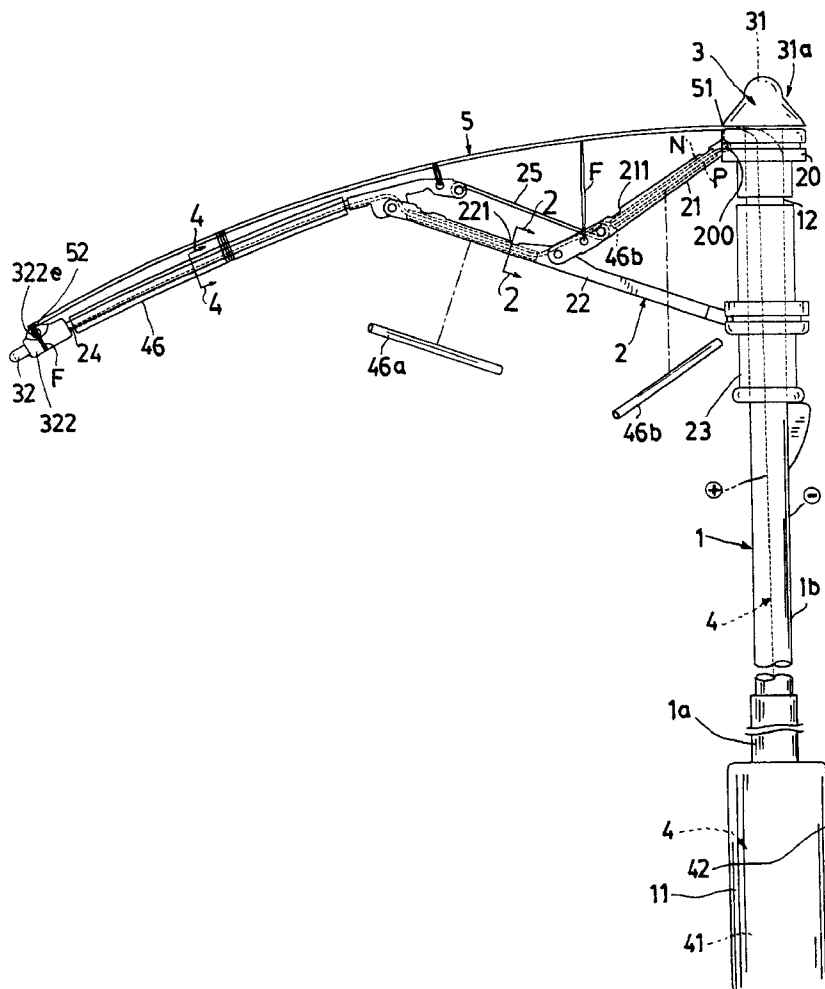
[58] **Field of Search** 362/102, 234,
362/253; 135/910

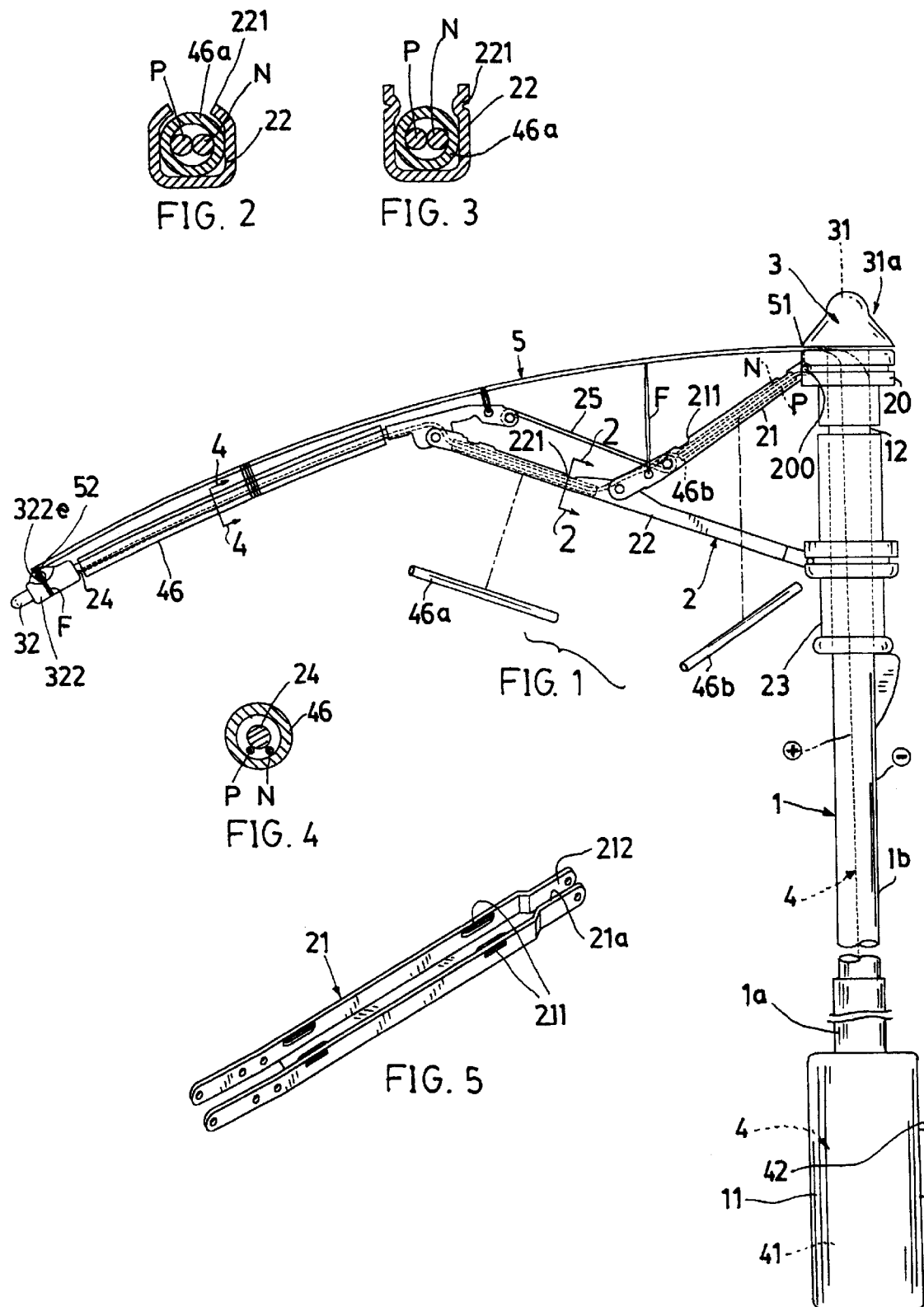
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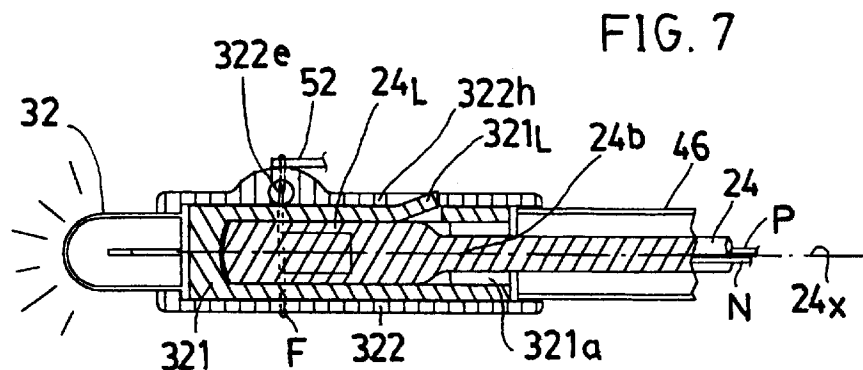
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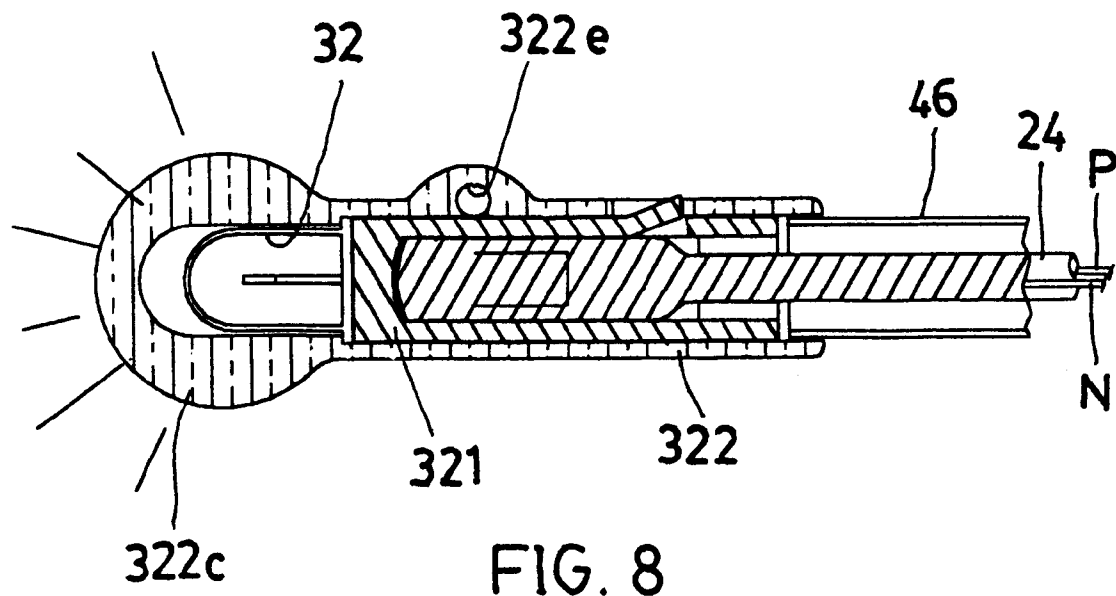
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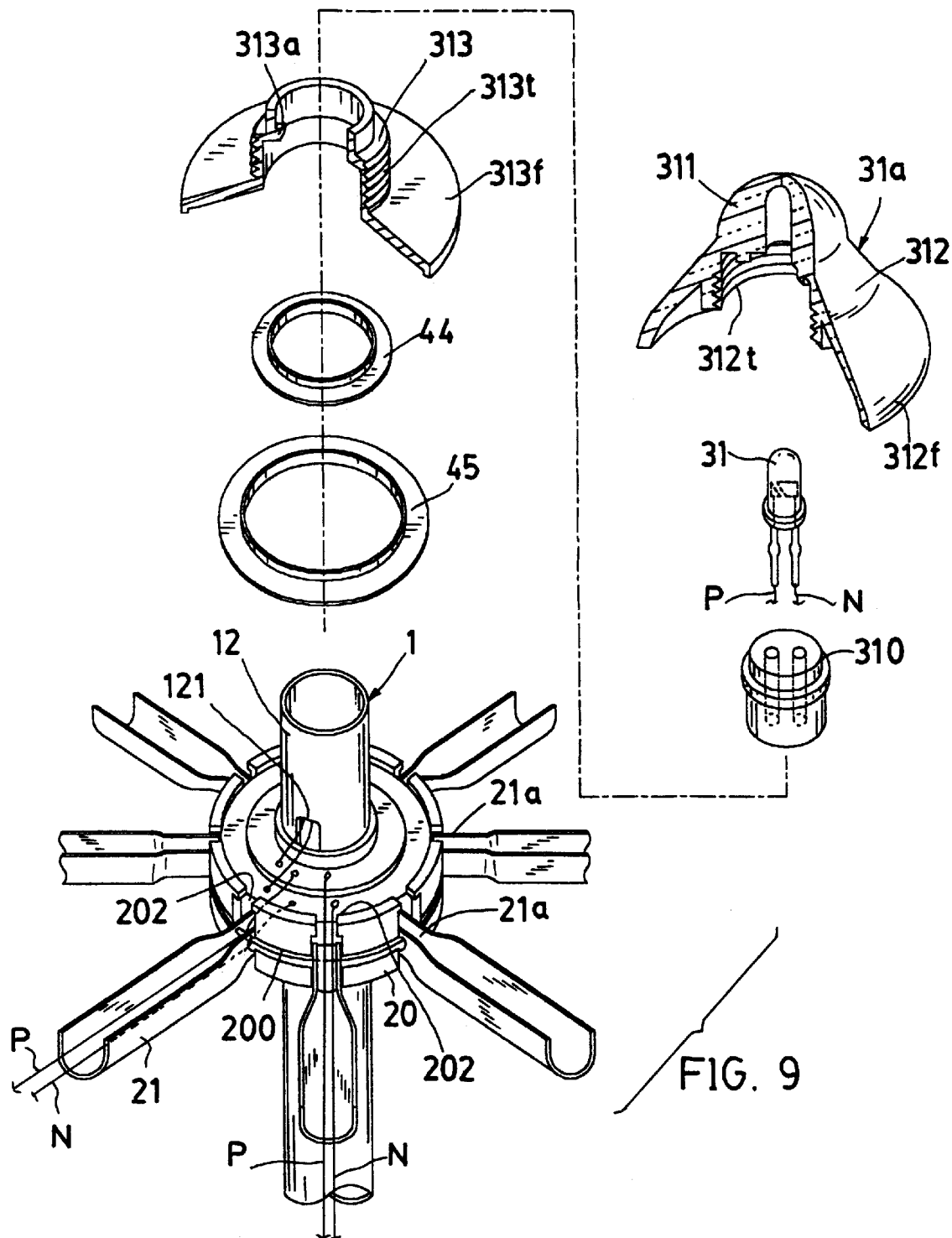
20 Claims, 14 Drawing Sheets











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