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Nie et al.

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(54) **LOCKING DEVICE, TELESCOPIC ROD AND MOWER COMPRISING THE LOCKING DEVICE**

(58) **Field of Classification Search**
None
See application file for complete search history.

(71) Applicant: **CHERVON INTELLECTUAL PROPERTY LIMITED**, Road Town (VG)

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Primary Examiner — Jacob Knutson

Assistant Examiner — Hilary L Johns

(74) *Attorney, Agent, or Firm* — Greenberg Traurig, LLP

(57) **ABSTRACT**

A locking device includes an operating lever, a base and a repulsion generating member, wherein the operating lever has a releasing position and a locking position relative to the base, and the repulsion generating member is arranged between the base and the operating lever and generates a repulsion force for application to the operating lever during movement from the releasing position to the locking position. When the operating lever does not completely reach the locking position due to abnormal operation, the repulsion generating member will cause the operating lever to return to the releasing position thereby provide an indication. The locking device can thus provide an indication when the locking operation does not reach the correct position, thereby avoiding user confusion and abnormal operation.

4 Claims, 9 Drawing Sheets

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **14/517,233**

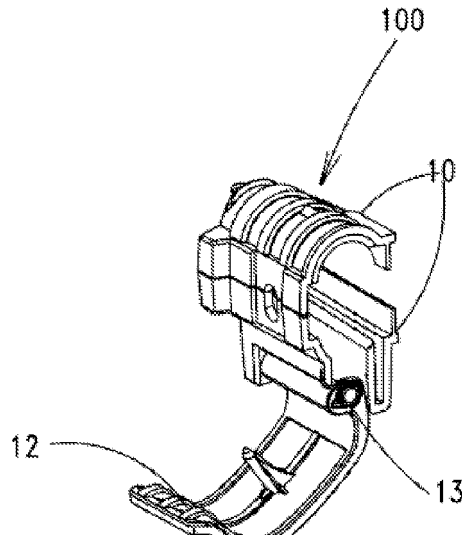
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(51) **Int. Cl.**
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A01D 34/00 (2006.01)
A01D 34/82 (2006.01)
F16B 7/14 (2006.01)
F16B 7/10 (2006.01)

(52) **U.S. Cl.**
CPC **A01D 34/824** (2013.01); **F16B 7/1418** (2013.01); **F16B 7/105** (2013.01); **F16B 7/1454** (2013.01); **Y10T 403/32467** (2015.01); **Y10T 403/595** (2015.01)



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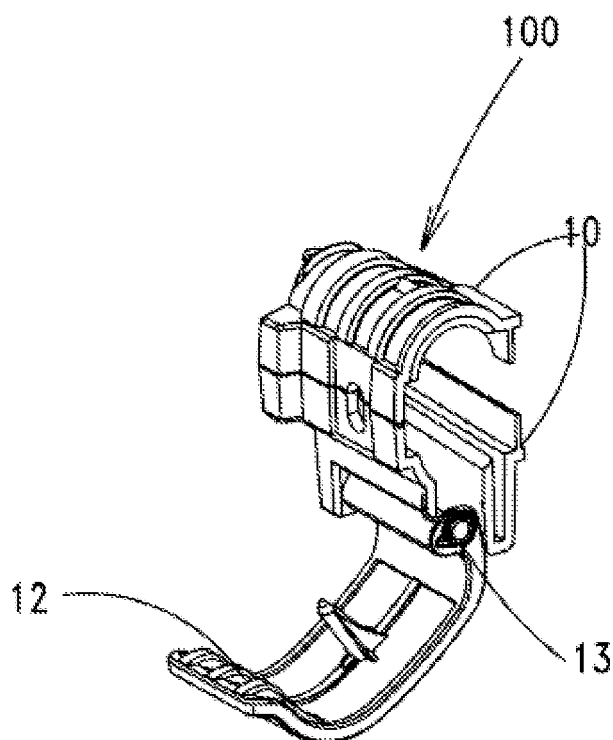


FIG. 1

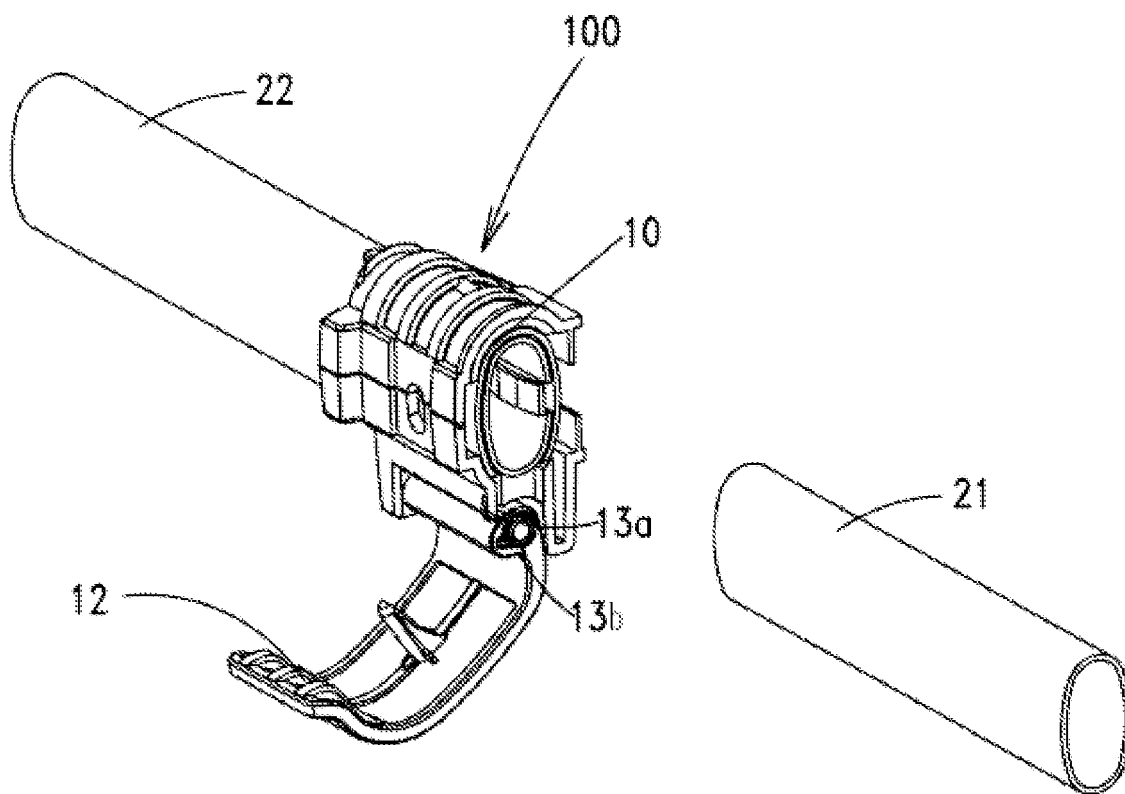


FIG.2

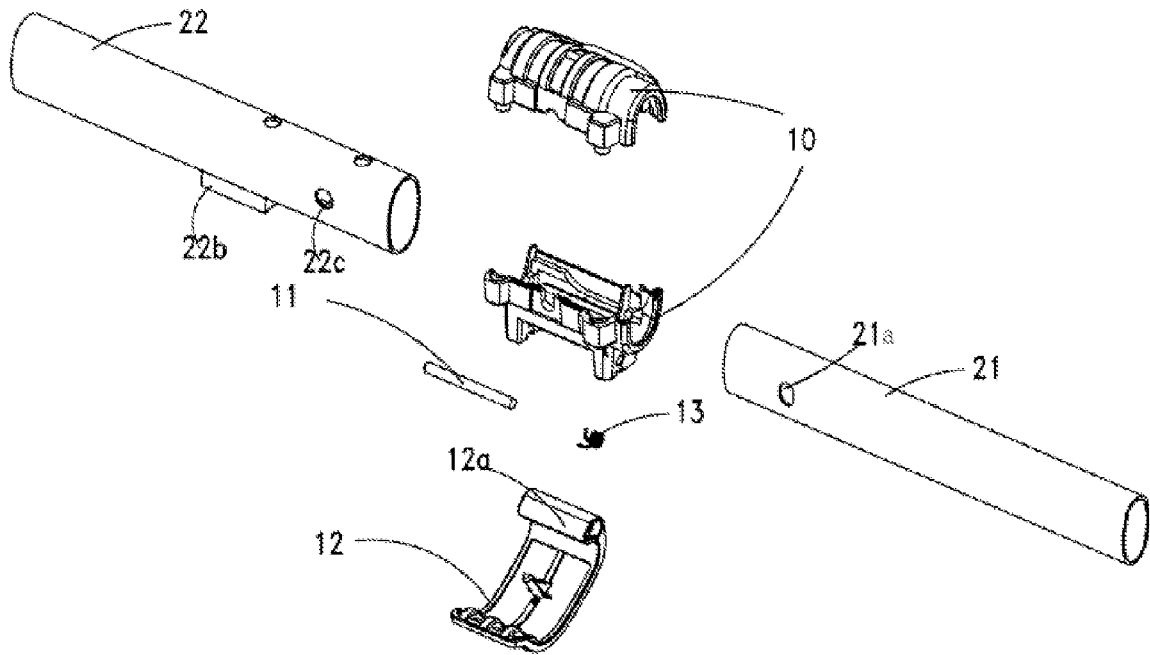


FIG.3

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