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Bonacini

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(54) **UPGRADED BEAD BREAKING UNIT FOR TYRE CHANGING MACHINES OR THE LIKE**

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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 225 days.

This patent is subject to a terminal disclaimer.

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USPC **157/1.17; 157/1.28**

(58) **Field of Classification Search**

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See application file for complete search history.

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(57) **ABSTRACT**

A bead breaking unit for tire changing machines includes an arm having a bead breaking tool and associated rotatable with a supporting structure between an away position, wherein the tool is spaced out from the supporting structure, and a work position, wherein the tool is near the supporting structure, an actuator apparatus having a mobile element associated sliding with the arm, a dragging device for dragging the arm, associated with the mobile element and suitable for operating during movement of the mobile element from an extracted position to a retracted position to bring the arm to the work position, a coupling device between the mobile element and the arm, suitable for operating during movement of the mobile element from the retracted to the extracted position to bring the arm from the work position to the away position, and a selection device associated with, and suitable for operating/disconnecting the coupling device.

18 Claims, 5 Drawing Sheets

