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**Jackson**

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(54) **ULTRASONIC TRANSDUCER WEAR CAP**

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USPC ..... **310/340**; 310/311; 310/326; 310/336; 310/345

(58) **Field of Classification Search**

USPC ..... 310/311, 326, 327, 335–337, 348, 340, 310/345

See application file for complete search history.

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(57) **ABSTRACT**

A wear cap including a flexible barrel and a rigid disc enables a high-frequency ultrasonic transducer to properly align to the surface of a material to be tested. The wear cap may be employed for any type of contact sensor that requires a protective wear cap and that needs to align to the surface of a material to be tested. An ultrasonic transducer assembly includes a wear cap and an ultrasonic transducer. The ultrasonic transducer is mounted in the wear cap and includes a transducer body with a cylindrical shape. A method of producing a wear cap for an ultrasonic transducer includes selecting a flexible material, forming a flexible barrel from the flexible material, selecting a rigid material, forming a rigid disc from the rigid material, and affixing the rigid disc to an end of the flexible barrel.

**19 Claims, 5 Drawing Sheets**

