The United States of America

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Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

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Attest

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(12) **United States Patent**
Iles et al.

(10) **Patent No.: US 6,481,267 B1**
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(54) **RHEOMETER**

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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 0 days.

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(52) **U.S. Cl.** **73/54.28**
(58) **Field of Search** 73/54.28, 54.29, 73/54.31, 54.32, 54.33, 54.34, 54.38

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(57) **ABSTRACT**

A rheometer incorporates a blade (1) mounted for rotation about an axis (2). The blade is of twisted form such that it has first and second regions. A first region of the blade (1) substantially at the axis of rotation (2) has a first angle formed by its surface with respect to a plane perpendicular to the axis of rotation such that the surface of the blade in the first region extends substantially parallel to the axis of rotation. A second region of the blade spaced from the axis of rotation has a second angle, different to the first angle, formed by its surface with respect to the plane perpendicular to the axis of rotation.

10 Claims, 4 Drawing Sheets