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Shih et al.

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[54] **DNA ENCODING *BACILLUS LICHENIFORMIS* PWD-1 KERATINASE**

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Related U.S. Application Data

[63] Continuation of Ser. No. 250,028, May 27, 1994, abandoned.

[57] **ABSTRACT**

[51] **Int. Cl.⁶** **C12N 9/56; C12N 1/20; C12N 15/00; C07H 21/04**

An isolated DNA encoding a keratinase is disclosed. The isolated DNA may be any of (a) isolated DNA which encodes the *Bacillus licheniformis* PWD-1 keratinase enzyme of FIG. 1, (b) isolated DNA which hybridizes to an oligonucleotide probe, which hybridizes to the DNA of (a) above, and does not hybridize to DNA encoding the *Bacillus licheniformis* NCIB 6816 subtilisin Carlsberg serine protease, and (c) isolated DNA differing from the isolated DNAs of (a) and (b) above in nucleotide sequence due to the degeneracy of the genetic code, and which encodes a keratinase enzyme.

[52] **U.S. Cl.** **435/222; 435/252.33; 435/252.5; 435/320.1; 536/23.2**

[58] **Field of Search** **435/219, 222, 435/252.33, 252.5, 320.1; 536/23.2**

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4 Claims, 2 Drawing Sheets