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Chang et al.

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(54) **ONCE DAILY FORMULATIONS OF TETRACYCLINES**

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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.

This patent is subject to a terminal disclaimer.

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Related U.S. Application Data

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(51) **Int. Cl.**
A61K 9/54 (2006.01)

(52) **U.S. Cl.** **424/458**

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

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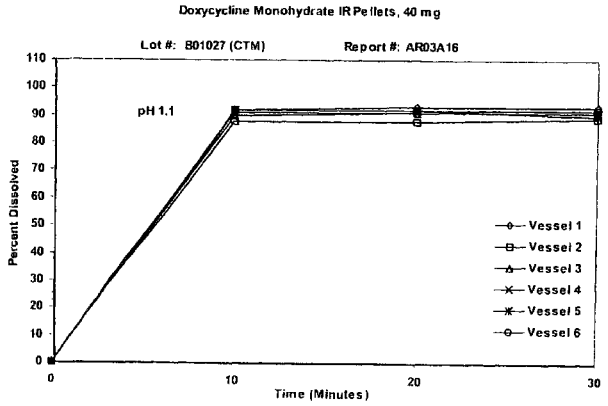
(57) **ABSTRACT**

Disclosed are once-daily formulations containing tetracyclines, especially doxycycline. Such formulations are useful, for instance, for the treatment of collagenase destructive enzyme-dependent diseases, such as periodontal disease and acne, and acute and chronic inflammatory disease states, such as rosacea and arthritis.

20 Claims, 6 Drawing Sheets



Dissolution profile for doxycycline monohydrate IR beads