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Camborde et al.

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(54) **METHOD FOR TREATMENT OF PAIN**

FOREIGN PATENT DOCUMENTS

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WO WO 01/01989 1/2001

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OTHER PUBLICATIONS

CA121:196575, Millan, Pain 1994 58(1) 45-61, abstract.*

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

The Pharmacologic Basis of Therapeutics, 5th edition, Macmillan Publishing Co., 1975, pp. 325-358.

(21) Appl. No.: **10/115,785**

Moltke, et al., "Gepirone and 1-(2-pyrimidinyl)-piperazine in vitro: human cytochromes mediating transformation and cytochrome inhibitors effects," Psychopharmacology, 1998, 140:293-299.

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(65) **Prior Publication Data**

* cited by examiner

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Related U.S. Application Data

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(51) **Int. Cl.**⁷ **A61K 31/495**; A61K 31/50; A61K 31/16

(57) **ABSTRACT**

(52) **U.S. Cl.** **514/252.18**; 514/629

A method of treating pain with acetaminophen comprises the concurrent administration of a hydroxyazapirone selected from 6-hydroxybuspirone or 3-hydroxygepirone. This combination of agents results in a more morphine-like analgesic response characterized by rapid onset and greater pain relief.

(58) **Field of Search** 514/629, 252.18

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,794,112 A 12/1988 Cooper
6,150,365 A 11/2000 Mayol

22 Claims, 2 Drawing Sheets