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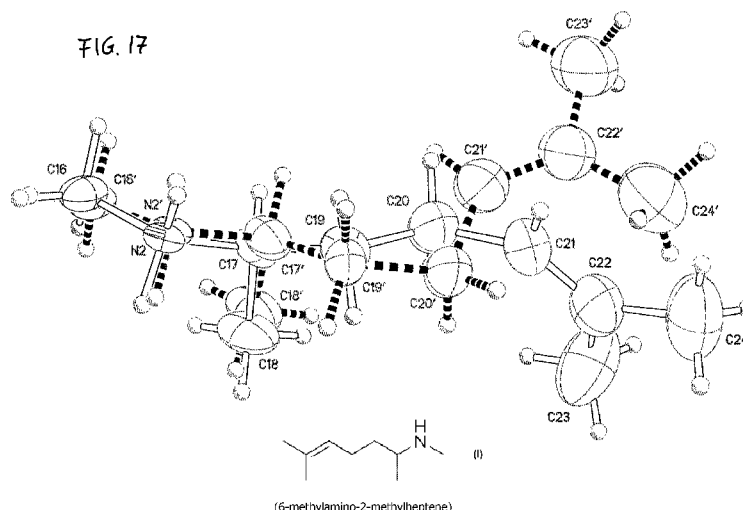
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(54) Title: ISOMETHEPTENE ISOMER



(57) Abstract: The invention relates to a purified Isometheptene compound comprising the structure according to Formula (I), (Formula (I)) or a hydrochloride, or a pharmaceutically acceptable addition salt thereof. In particular, the disclosure relates to the synthesis, purification and characterization of an Isometheptene isomer mucate crystal 2, wherein the Isometheptene isomer 2 is stereochemically characterized as (R)-enantiomer, respectively. The Isometheptene (R)-enantiomer activity indicates a selective centrally acting selective ligand for Imidazoline subtype 1 (I1) receptor sites; and more specifically, the disclosure provides an antihypertensive composition for treatment of migraine and other neurovascular or neurogenic pain from abdominal distress. (R)-Isometheptene enantiomer or isomer 2 may be an anti-hypertensive agent with lower side effects than the racemate form. Therefore (R)-Isometheptene is believed to be effective against episodic tension-type headaches (ETTH). The (R)-Isometheptene enantiomer or isomer 2 is believed to effectively lower blood pressure, used alone or together with other headache ameliorating drugs. Methods of synthesis and treatment are described. Regarding (R)- Isometheptene crystals data of X-ray crystallography are presented.



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