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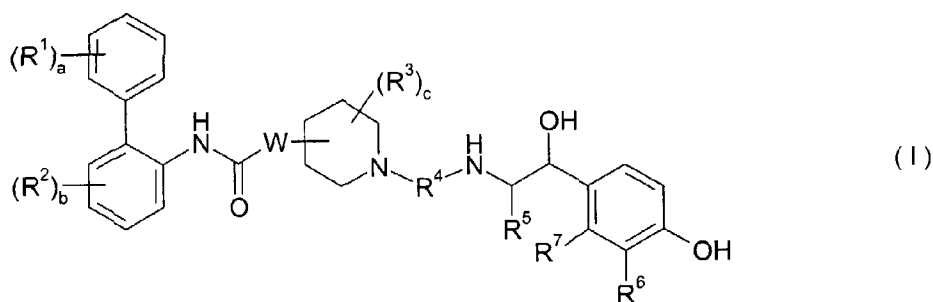
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(54) Title: BIPHENYL DERIVATIVES HAVING BETA2 ADRENERGIC RECEPTOR AGONIST AND MUSCARINIC RECEPTOR ANTAGONIST ACTIVITY



(57) Abstract: This invention provides biphenyl derivatives of formula I: wherein R¹, R², R³, R⁴, R⁵, R⁶, R⁷, W, a, b and c are as defined in the specification, or a pharmaceutically acceptable salt or solvate or stereoisomer thereof. The biphenyl derivatives of this invention possess both β₂ adrenergic receptor agonist and muscarinic receptor antagonist activity and therefore, such biphenyl derivatives are useful for treating pulmonary disorders, such as chronic obstructive pulmonary disease and asthma.

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