

[54] **PREPARATION PROCESS OF  
(6R)-TETRAHYDRO-L-BIOPTERIN**

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[58] **Field of Search** ..... 544/258; 260/690

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

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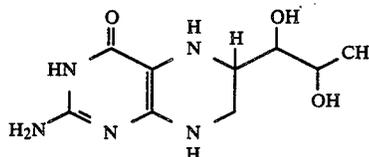
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[57] **ABSTRACT**

(6R)-Tetrahydro-L-biopterin of the following formula:



is prepared by catalytically reducing L-erythrobiopterin or an acyl derivative thereof in the presence of an amine, at pH 10-13 and with a platinum-base catalyst and when one or more acyl groups still remain, then removing the acyl groups. (6R)-Tetrahydro-L-biopterin is effective for the treatment of certain serious neuroses and malignant hyperphenylalaninemia. The present invention has succeeded in preparing (6R)-tetrahydro-L-biopterin at a high asymmetric ration R/S and moreover with a high yield. Since the process of this invention makes use of an amine as a base, the process is free from admixture of any inorganic salt and can hence provide high-purity crystals with ease.

**11 Claims, No Drawings**