



(12) **United States Patent**
Richardson

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(54) **PHENYLALANINE HYDROXYLASE GENE VARIANTS, AND AMINO ACID AND PTERIN HOMEOSTASIS, IN THE DEFINITION, DETECTION, TREATMENT AND PREVENTION OF PSYCHOTIC, MOOD AND PERSONALITY DISORDERS**

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(58) **Field of Search** 435/6, 810; 536/27, 536/28, 29

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(57) **ABSTRACT**

The present invention describes sequence variants in the phenylalanine hydroxylase gene, and biochemical measures of amino acid and pterin homeostasis, which are associated with Psychotic, Mood and Personality Disorders. Methods for the definition of etiological/pathophysiological subtypes of the disorders and for the detection of disorder susceptibility are provided. Treatment and prophylactic strategies targeted at the elaborated psychopathology are also disclosed.

11 Claims, No Drawings