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(54) Title: BIOSYNTHESIS OF CANNABINOID PRECURSORS USING NOVEL AROMATIC PRENYL TRANSFERASES

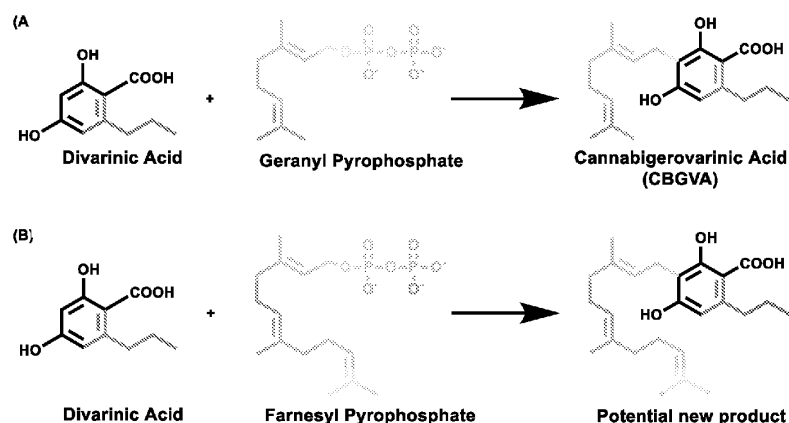


Fig. 4

(57) Abstract: A method for producing a cannabinoid precursor by contacting a substrate and geranyl pyrophosphate or farnesyl pyrophosphate with an NphB orthologue. The NphB orthologue is from an organism other than *Cannabis sativa*, and the substrate can be 2,4-dihydroxy-6-pentylbenzoic acid or 2,4-dihydroxy-6-propylbenzoic acid. Also disclosed is a recombinant cell of *Yarrowia lipolytica*, carrying in its genome a nucleic acid encoding an NphB orthologue from an organism other than *Cannabis sativa* such that the NphB orthologue is expressed in the recombinant cell.

[Continued on next page]

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