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(54) Title: ENZYMATIC PROCESSES FOR THE PRODUCTION OF 4-SUBSTITUTED 3-HYDROXYBUTYRIC ACID DERIVATIVES AND VICINAL CYANO, HYDROXY SUBSTITUTED CARBOXYLIC ACID ESTERS

(57) Abstract: The present invention provides methods and composition for preparing 4-substituted 3-hydroxybutyric acid derivatives by halohydrin dehalogenase-catalyzed conversion of 4-halo-3-hydroxybutyric acid derivatives. The present invention further provides methods and compositions for preparing 4-halo-3-hydroxybutyric acid derivatives by ketoreductase-catalyzed conversion of 4-halo-3ketobutyric acid derivatives. The present invention also provides methods and compositions for preparing vicinal cyano, hydroxyl substituted carboxylic acid esters.

WO 2005/018579 A3