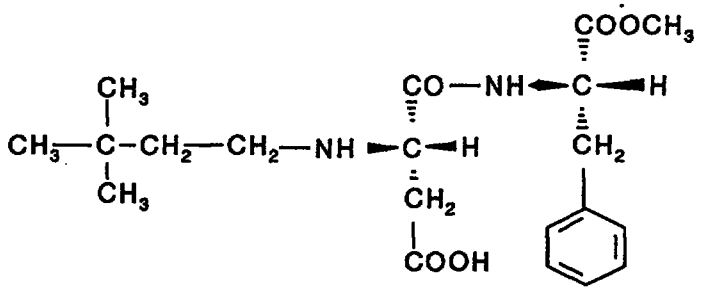
ABSTRACT OF THE DISCLOSURE

A method of preparing N–[N–(3,3–dimethylbutyl)– L–α–aspartyl]–L–phenylalanine 1–methyl ester of the formula :



useful as a sweetening agent, method characterised in that an aqueous–alcoholic solution of aspartame and 3,3–dimethylbuty–raldehyde of pH 4.5–5 is treated, at room temperature, with hydrogen at a pressure less than or equal to 1 bar, in the presence of a catalyst selected from the group comprising platinum or palladium on activated carbon or in the form of platinum or palladium black, and in that the product formed is purified by precipitation and filtration after evaporation of the alcohol part of the solvent under vacuum.