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[54] **PROCESS FOR THE MANUFACTURING OF ZEAXANTHIN FROM LUTEIN**

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[51] **Int. Cl.**[6] **C07C 35/21**

[52] **U.S. Cl.** **568/816**

[58] **Field of Search** 568/816, 834, 568/822, 823, 828, 824, 832

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[57] **ABSTRACT**

A process for the conversion of lutein or of its esters into zeaxanthin by base-catalyzed isomerization is disclosed. The process is carried out by heating an optionally pretreated lutein-containing material in a mixture of an aqueous solution of an alkali hydroxide and either dimethyl sulphoxide or an organic solvent based on saturated aliphatic and/or aromatic hydrocarbons at temperatures in the range from about 50° C. to about 120° C. The process is carried out in the presence of a phase transfer catalyst when an organic solvent based on hydrocarbons is used. Being carotenoids, lutein and zeaxanthin are used correspondingly, especially as pigments for egg yolk, the integuments and the subcutaneous fat of poultry, the flesh and the integuments of fish and crustaceans, as well as foodstuffs. Zeaxanthin is preferably used in many applications, since in comparable dosages it produces a more intensive golden yellow pigmentation than lutein.

17 Claims, No Drawings