MANUFACTURING TECHNIQUE FOR CITRAL, A FRAGRANT COMPOUND OF CITRUS PLANTS

Description
A unique synthesis method for CITRAL based on new-generation catalysts has been developed. CITRAL is a main component of lemon, eucalyptus, coriander and verbena aromatic oils.
CITRAL is a light-yellow oil with a strong scent of lemon, orange and tangerine peel and a faint note of eucalyptus. It is an obligatory component of classic fragrant compositions for perfumes, creams, lotions, and shampoos. CITRAL is a basis for synthesizing a great number of other valuable fragrance compounds, such as ionones (violet fragrance), eugenal (flower and verdure fragrance), geraniol and citronellol (rose fragrance), etc., as well as for carotinoids used for vitamins A and E preparations (to prevent aging and malignant tumors).

Technical appraisal and economic benefits
The advantages of new technology of CITRAL production are high safety, effectiveness and intensity of the process:
- highly selective catalysts of new generation are used (copper acetylenides are not applied);
- liquid ammonia (toxic solvent, which forms explosive mixtures with air) is not used;
- acetylene is used under atmospheric pressure;
- there are no harmful emissions and wastes.

Application areas
Perfumery, cosmetics, food industry, and medicine.

Development stage
A pilot plant was set up on the basis of the A.E. Favorsky Irkutsk Institute of Chemistry SB RAS.

Patent situation
The product is protected by 5 RF patents.

Commercial offers
License agreement.
Know-how transfer.

Estimated Cost
To be negotiated.

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