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(54) Title: SYNTHESIS OF CARBAMATE THROUGH LOW PRESSURE HETEROGENEOUS OXIDATIVE CARBONYLATION OF AMINES

(57) Abstract: The process disclosed herein satisfies the need in the art for an industrially viable oxidative carbonylation catalytic system, and is capable of producing carbamates at a significantly higher rate than those processes reported in journal and patent literature. This reaction process takes place via a reaction mechanism that does not involve drastic conditions. Specifically, the catalytic system of the present invention employs Group VIII metal catalysts and/or copper-based catalysts with halide promoters to produce carbamates through heterogeneous oxidative carbonylation at atmospheric pressure and relatively non-drastring temperatures in a gas-solid carbonylation process.

INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C07C205/00
US CL : 560/157

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 560/157, 24, 25, 158

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EAST, STN, CAPLUS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5962721 A (KIM et al) 05 October 1999, see the entire document.	1 to 14
A	US 5902894 A (RYU) 11 May 1999, see the entire document.	1-14
A	US 4251667 A (KESLING Jr) 17 February 1981, see the entire document.	1-14
A	US 5502241 A (CHAUNDHARI et al) 26 March 1996, see the entire document.	1-14
A	US 5220069 A (KING et al) 15 June 1993, see the entire document	1 to 14

Further documents are listed in the continuation of Box C. See patent family annex.

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"O" document referring to an oral disclosure, use, exhibition or other means	
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