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(54) **Title:** REGENERATION OF IONIC LIQUID CATALYST USING A METAL IN THE ABSENCE OF ADDED HYDROGEN

(57) **Abstract:** A process for regenerating a used acidic ionic liquid catalyst comprising contacting the used ionic liquid catalyst with at least one metal in a regeneration zone in the absence of added hydrogen under regeneration conditions for a time sufficient to increase the activity of the ionic liquid catalyst is described. In one embodiment, regeneration is conducted in the presence of a hydrocarbon solvent.



WO 2007/124343 A3

INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC: BOIJ 20/34(2006.01)

USPC: 502/20

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 . 502/20

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,104,840 A (CHAUVIN et al.) 14 April 1992 (14.04.1992), abstract, description.	1-25
X	US 6,797,853 B2 (HOZVICKA et al.) 28 September 2004 (28.09.2004), abstract, description	1-25

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"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

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