

Title (en)
LEWIS BASE CATALYSTS AND METHODS THEREOF

Title (de)
LEWIS-BASENKATALYSATOREN UND VERFAHREN DAFÜR

Title (fr)
CATALYSEURS À BASE DE LEWIS ET PROCÉDÉS ASSOCIÉS

Publication
EP 3924397 A1 20211222 (EN)

Application
EP 20755183 A 20200211

Priority
• US 201962804389 P 20190212
• EP 19179810 A 20190612
• US 2020017757 W 20200211

Abstract (en)
[origin: WO2020167838A1] The present disclosure relates to Lewis base catalysts. Catalysts, catalyst systems, and processes of the present disclosure can provide high temperature ethylene polymerization, propylene polymerization, or copolymerization as the Lewis base catalysts (e.g., bis(arylphenol ate) five-membered ring catalysts), can be stable at high polymerization temperatures and have good activity at the high polymerization temperatures. The stable catalysts with good activity can provide formation of polymers having high molecular weights or polymers having low to very molecular weights, and the ability to make an increased amount of polymer in a given reactor, as compared to conventional catalysts. Hence, the present disclosure demonstrates highly active catalysts capable of operating at high reactor temperatures while producing polymers with controlled molecular weights and or robust isotacticity.

IPC 8 full level
C08F 210/06 (2006.01); **C08F 4/02** (2006.01); **C08F 4/64** (2006.01); **C08F 4/659** (2006.01); **C08F 210/02** (2006.01)

CPC (source: EP)
C08F 110/02 (2013.01); **C08F 110/06** (2013.01); **C08F 210/16** (2013.01); **C08F 4/659** (2013.01); **C08F 4/65908** (2013.01); **C08F 4/65912** (2013.01)

C-Set (source: EP)
1. **C08F 110/02 + C08F 2500/34 + C08F 2500/03 + C08F 2500/01**
2. **C08F 110/02 + C08F 2500/34 + C08F 2500/03 + C08F 2500/02**
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4. **C08F 210/16 + C08F 210/14 + C08F 2500/34 + C08F 2500/03 + C08F 2500/01**
5. **C08F 110/06 + C08F 2500/34 + C08F 2500/03 + C08F 2500/02**
6. **C08F 110/02 + C08F 2500/34 + C08F 2500/03**
7. **C08F 210/16 + C08F 210/14 + C08F 2500/34 + C08F 2500/03**
8. **C08F 10/00 + C08F 4/64158**
9. **C08F 110/06 + C08F 2500/34 + C08F 2500/02 + C08F 2500/03**

Cited by
EP4103629A4; EP4103630A4; EP4103628A4

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2020167838 A1 20200820; CN 113423744 A 20210921; CN 113423744 B 20230505; EP 3924397 A1 20211222; EP 3924397 A4 20220622; SG 11202108010R A 20210830

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US 2020017757 W 20200211; CN 202080013689 A 20200211; EP 20755183 A 20200211; SG 11202108010R A 20200211