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- (71) **Applicant** (for all designated States except US): **BRIDGESTONE CORPORATION** [JP/JP]; 10-1, Kyobashi 1-chome, Chuo-ku, Tokyo 1048340 (JP).
- (72) **Inventors; and**
- (75) **Inventors/Applicants** (for US only): **QIN, Zengquan** [CA/US]; Bridgestone Americas Center for Research & Technology, 1655 South Main Street, Akron, Ohio 44301 (US). **LUO, Steven** [US/US]; Bridgestone Americas Center for Research & Technology, 1655 South Main Street, Akron, Ohio 44301 (US). **DICKSTEIN, Joshua, S.** [US/US]; Bridgestone Americas Center for Research & Technology, 1655 S. Main St., Akron, Ohio 44301 (US).
- (74) **Agents:** **WOOD, Jonathan, D.** et al.; Bridgestone Americas, Law Dept., 1200 Firestone Parkway, Akron, OH 44317-0001 (US).
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(54) **Title:** LANTHANIDE COMPLEX CATALYST AND POLYMERIZATION METHOD EMPLOYING SAME

(57) **Abstract:** A novel class of lanthanide metal phenoximine complexes can be used as an ingredient of a catalyst system. The catalyst system can be used in polymerizations of ethylenically unsaturated hydrocarbon monomers.



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A. CLASSIFICATION OF SUBJECT MATTER*C07F 13/00(2006.01)i, C07F 1/00(2006.01)i, B01J 31/12(2006.01)i, C08F 36/06(2006.01)i*

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)

C07F 13/00

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)

eKOMPASS(KIPO internal) & Keywords: Lanthanide-Schiff base complex, amido complex, catalyst composition, polymerization catalyst

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	QIN, D. et al. 'Migration of Amide to Imine Group of Lanthanide Schiff Base Complexes: Effect of Amido Group.' In: Dalton Trans., 2009, pp. 5535-5541.	1,3,5
A	See schemes 1, 3.	2,4,6-15
X	HAN, F. et al. 'Quinoline Ring C-H Bond Activation in Bis(3,5-di-tert-butylsalicylidene)-8-aminoquinoline Bis(trimethylsilyl)amido Lanthanide Complexes.' In: Organometallics, 2010, Vol. 29, pp. 3467-3470.	1,3
A	See scheme 1.	2,4-15
X	WANG, Q. et al. 'Synthesis of Amidolanthanides with New Chiral Biaryl NNO Ligands and Their Use as Catalysts for Enantioselective Hydroamination/Cyclization.' In: Inorg. Chem., 2008, Vol. 47, pp. 4319-4328.	1,3
A	See scheme 1.	2,4-15
A	GALYAMETDINOV, Y. G. et al. 'Synthesis, Mesomorphism, and Unusual Magnetic Behaviour of Lanthanide Complexes with Perfluorinated Counterions.' In: Chem. Eur. J, 2001, Vol. 7, pp. 99-105.	1-15
	See the whole document.	



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

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"P" document published prior to the international filing date but later than the priority date claimed

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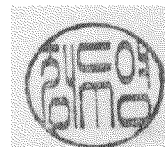
Korean Intellectual Property Office
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Authorized officer

Jung Doo Young

Telephone No. 82-42-481-8699



INTERNATIONAL SEARCH REPORT

Information on patent family members

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None