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KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
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European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
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ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: BRANCHED POLYPHENYLENE POLYMERS

(57) Abstract: Branched polyarylene polymers are provided comprising monovalent endcappers, divalent linear units, and polyva-  
lent branching units. The composition of the polymers is controlled by adjusting the ratio of the three types of monomers.



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**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US05/07210

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC: C08F 283/08( 2006.01)  
C08G 61/10( 2006.01)

USPC: 525/534,133,144,146,147,191,192,197,203,219,219,235,334.1;528/86,98,99,169,174,218,219  
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. : 525/534,133,144,146,147,191,192,197,203,219,219,235,334.1; 528/86,98,99,169,174,218,219

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
NONE

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

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	KIM et al., Hyperbranched Polyphenylenes, Macromolecules, Vol. 25, No 21, October 12, 1992, pp. 5561-5572	1-58

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
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**INTERNATIONAL SEARCH REPORT**

International application No.

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Continuation of B. FIELDS SEARCHED Item 3:

Inventor name search, STN, search terms: polyphenylene polymer#, branch?, (endcap? or end group#), (trichlorobenzene or phenylenetriyl) and (dichlorobenzene or dichlorobenzophenone or benzoylphenylene) and (chlorobenzene or phenyl)