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(54) Title: COLORED OXYGEN SCAVENGING POLYMERS

(57) Abstract: The present invention relates to a melt blend of a base polymer, an oxidizable organic polymer, a transition metal salt catalyst and a colorant that does not completely deactivate the catalyzed oxidation. A preferred colorant, yields in an article made from the polymer melt blend a Catalyst Deactivation Factor (CDF) of less than about 0.25, preferably less than 0.15, more preferably less than 0.1, and most preferred less than 0.05. The present invention also comprises a colored monolayer article having the described CDF, such as a film, thermoformed tray, or blow molded container, that has active oxygen scavenging properties. The colorant, after melt blending a base polymer, an oxidizable organic polymer, a transition metal catalyst, does not increase the binding energy of the transition metal catalyst ion by more than 1 eV.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/29297

A. CLASSIFICATION OF SUBJECT MATTER				
IPC(7) : C08L 67/02, 77/00; B32B 27/34,27/36 US CL : 524/513,601; 525/165,437,440; 428/480				
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.: 524/513,601; 525/165,437,440; 428/480				
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) Please See Continuation Sheet				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.	
Y	US 5,340,884 (MILLS et al) 23 August 1994 (23.08.	1994), column 1, lines 10-20, column 3,	1-20	
Y	lines 28-30, column 7, lines 11-13. US 2003/0031815 A1 (SCHIRALDI et al) 13 February 2003 (13.02.2003), paragraphs 1-20			
Y	[0002], [0018], [0040], and [0042]. US 2002/0173591 A1 (CHISHOLM et al) 21 November 2002 (21.11.2002), paragraphs [0002], [0032], [0033], and [0037].			
Α	US 6,2888,161 B1 (KIM et al) 11 September 2001 (11.09.2001), column 4, lines 1-45.			
A	US 6,365,247 B1 (CAHILL et al) 02 April 2002 (02.04.2002), column 20, lines 35-55.		1-20	
Α	US 6,444,283 B1 (TURNER et al) 03 September 200	02 (03.09.2002), column 2, lines 25-55.	1-20	
Further	documents are listed in the continuation of Box C.	See patent family annex.		
* Special categories of cited documents:		"T" later document published after the inte		
"A" document defining the general state of the art which is not considered to be of particular relevance		date and not in conflict with the applic principle or theory underlying the inver	ntion	
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Continuation of B. FIELDS SEARCHED Item 3:				
EAST, search terms: catalyst deactivation factor, polyester, PET, polyethylene terephthalate, polyamide, polybutadiene, mxd6, colorant,				
dye, pigment, cobalt stearate, packaging, package, food, container, tray, film, copo	lyester, sulfonate, sodiumsulfoisophthalic,			
sulfoisophthalic, blend, blending, blended, cobalt catalyst, quinoline, azo, anthraq methane, phthalocyanine	unione, quinoprimitione, permone, azemesime,			
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