

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
11 December 2003 (11.12.2003)

PCT

(10) International Publication Number  
**WO 03/102111 A1**

(51) International Patent Classification: **C09K 11/08**,  
C08K 9/06, C08J 5/18

(21) International Application Number: PCT/US03/15135

(22) International Filing Date: 14 May 2003 (14.05.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
10/160,762 31 May 2002 (31.05.2002) US

(71) Applicant: **GENERAL ELECTRIC COMPANY**  
[US/US]; 1 River Road, Schenectady, NY 12345 (US).

(72) Inventors: **BROWN, Michael, W.**; 3216 Ferwood Drive,  
Mt. Vernon, IN 47620 (US). **ROSENDALE, David**; 3106  
Fernwood Drive, Mt. Vernon, IN 47620 (US). **SCHOTT-  
LAND, Philippe**; 5530 Calle Las Palmas, Evansville, IN  
47712 (US).

(74) Agents: **WINTER, Catherine, J.** et al.; General Elec-  
tric Company, 3135 Easton Turnpike (W3C), Fairfield, CT  
06828 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG,  
SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU,  
ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

(54) Title: PHOSPHORESCENT THERMOPLASTIC CONCENTRATE AND MOLDED ARTICLES

(57) Abstract: Thermoplastic composition comprising a thermoplastic resin and a phosphorescent pigment with an aluminate matrix expressed by M-A1 in which M is at least one metal element selected from calcium, strontium and barium and A1 represents an aluminate group, wherein the pigment has been coated with a silicone oil. Objects formed by injection molding of the thermoplastic resin compositions. The compositions of the invention exhibit improved melt flow stability and suffer less from graying upon compounding them in an extruder.



**WO 03/102111 A1**