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(72) Inventor; and

(71) Applicant : GHARDA, Keki Hormusji [IN/IN]; Gharda House, 48 Hill Road, Bandra (west), Mumbai 400050, Maharashtra (IN).

(74) Agent: MOHAN, Dewan; R.K. Dewan & Company, Trade Mark & Patent Attorneys, Podar Chambers, S.A. Brelvi Road, Fort, Mumbai 400001, Maharashtra (IN).

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Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- of inventorship (Rule 4.17(iv))

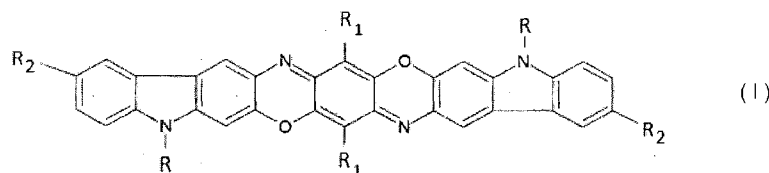
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(54) Title: CARBAZOLE DIOXAZINE PIGMENT AND A METHOD FOR ITS PREPARATION



(57) Abstract: The present disclosure provides carbazole-dioxazine pigment of Formula I; wherein, R is C₁-C₈ alkyl group, preferably R is an ethyl group, R₁ is a chloro group, and R₂ is a -NHC(=O)Ph group. The pigment is synthesized from 3-nitro-N-ethylcarbazole. The first step is nitration of 3-nitro-N-ethylcarbazole to form 3,6-dinitro-N-ethylcarbazole which is reduced to form 3-amino-6-nitro-N-ethylcarbazole. This amino compound is benzoylated to form 3-benzamido-6-nitro-N-ethylcarbazole which is then hydrolyzed to form 6-amino-3-benzamido-N-ethylcarbazole. Condensation of 6-amino-3-benzamido-N-ethylcarbazole with chloroanil provides an intermediate. Cyclization of the intermediate in the presence of a cyclization reagent provides the compound of Formula-I. The pigment has wavelength of maximum absorption (λ_{max}) at 571nm in dimethylformamide as a solvent.



INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER
C09B5/26, C09B5/60, C07D498/22, C07D498/04 Version=2014.01

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)

C09B, C07D

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)

ORBIT, IPO INTERNAL, key words: carbazole dioxazine, pigment violet 23, benzamido group and chloranil.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO2012001708 A1 (HORMUSJI GHARDA KEKI [IN] ET AL) 05-01-2012 ABSTRACT	1-16
Y	US4345074 (A) (HUFNAGEL THEOBALD ET AL) 17-08-1982 DESCRIPTION	1-16
Y	WO2008071585 A2 (MAURER MARC [FR] ET AL) 19-06-2008 DESCRIPTION	1-16

☐ 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 international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	
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"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

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Plot No.32, Sector 14, Dwarka, New Delhi-110075
Facsimile No.

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Ramesh Vanaparthi

Telephone No. +91-1125300200

INTERNATIONAL SEARCH REPORT
Information on patent family members

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Citation	Pub.Date	Family	Pub.Date
WO 2012001708 A1	05-01-2012	AE NONE	
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