## (19) World Intellectual Property Organization

International Bureau



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With international search report.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: REACTIVE DYE MIXTURES

$$Y_1-O_2S$$

N

OH

NH<sub>2</sub>

N

HO<sub>3</sub>S

SO<sub>3</sub>H

(A)

(57) Abstract: A dye mixture comprises, as component (A), a reactive dye of the formula (A) wherein each of Y¹ and Y², independently, is a vinyl group or a group of the formula -CH₂CH₂Q in which Q is a leaving group removable under alkaline conditions to provide a vinyl group; and, as component (B), at least one additional reactive dye selected from a monopyrazole dye of the formula (II), a mono or disazo dye of the formula (II), a monoazopyridone dye of the formula (III), a monoazonaphthyl dye of the formula (IV), a disazoaminonaphthyl dye of the formula (V), a formazan dye of the formula (VI), an azoacetoacetanilide dye of the formula (VII), a disazo dye of the formula (VIII), a naphthalimide or a naphthalenetriazole dye of the formula (IX), a metal phthalocyanine dye of the formula (X) or a triphendioxazine dye of the formula (XI), as defined herein.

01/00736 A

International Application No PC IB 00/00902

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C09B67/22 C09B62/25 C09B62/09 C09B62/513

According to International Patent Classification (IPC) or to both national classification and IPC

#### **B. FIELDS SEARCHED**

 $\frac{\text{Minimum documentation searched (classification system followed by classification symbols)}}{1\,\text{PC}-7-\text{C09B}}$ 

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 practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUM	ENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0 870 807 A (CIBA GEIGY AG) 14 October 1998 (1998-10-14)	1-76, 78-80, 82-88
Χ	abstract example 9	81
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Y,P	EP 0 982 374 A (DYSTAR TEXTILFARBEN GMBH & CO) 1 March 2000 (2000-03-01)	1-76, 78-80,
Х,Р	abstract; example 10	82-88 1-3, 30-32, 34-36
	-/	

X Further documents are listed in the continuation of box C.	X Patent family members are listed in annex.
"A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier document but published on or after the international filing date  "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)  "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	"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  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  "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.  "&" document member of the same patent family
Date of the actual completion of the international search  9 October 2000	Date of mailing of the international search report  1 2. 01. 01
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016	Authorized officer  Dauksch, H

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	the whole document  EP 0 224 224 A (HOECHST AG) 3 June 1987 (1987-06-03) cited in the application the whole document  EP 0 668 328 A (HOECHST AG) 23 August 1995 (1995-08-23) cited in the application the whole document  EP 0 600 322 A (HOECHST AG) 8 June 1994 (1994-06-08) cited in the application

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## INTERNATIONAL SEARCH REPORT

BOX I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
Claims Nos.:  because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  1-76,78-81,83-88
Remark on Protest  The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-76,78-81,83-88

Mixtures of a reactive dye A with a at least one reactive dye B - a dye of 85A as described in claim 81

2. Claim: 77

Dye of formula 71

3. Claim: 82

A dye of formula 85B

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