TABLE 2-continued

No.	Absorption of the water dispersion: λ max (nm)	A⁻	A⁺	Color tone	Dependency on paper	Water resistance	Light resistance
Example 4	551	0.17	0.05	A	A	A	A
Example 5	540	0.18	0.05	A	A	A	A
Comparative example 1	534	0.31	0.21	B	B	A	B
Comparative example 2	536	0.41	0.03	A	B	C	B

A^-: Absorbance at (λ max − 75 (nm))
A^+: Absorbance at (λ max + 75 (nm))

[0464] As is evident from Table 2, the inks for ink-jet of the present invention were superior in color-developability, color tone, water resistance and light resistance, and did not depend on the type of paper.

Example 6

[0465] This example was effected in the same manner as in Preparation Example 2 except that the oil soluble dye (I-30) was replaced by each of dyes shown in Table 3, so as to prepare each of coloring compositions (B-11)-(B-36) whose solid content by percentage was 20%. The particle diameter (volume average diameter) of the coloring particulates in each of the coloring composition is shown in Table 3. Further this example was carried out in the same manner as Example 1 except that the coloring composition (B-1) was replaced by each of the coloring composition (B-2), (B-6), and (B-11)-(B-36), so as to prepare an ink for ink-jet. Each of the resultant inks was allowed to stand still at 25° C. for one month. Thereafter, the ink was filtered with a filter having 0.2 μm mesh. The colored degree of the used filter was examined. The ink which hardly caused coloration was ranked as A, and the ink which caused slight coloration was ranked as B. The ink which caused considerable coloration was ranked as C.

TABLE 3

Compound No.	Coloring composition No.	Particle diameter of the coloring composition (nm)	Colored degree of the filter
I-2	(B-11)	52	B
I-3	(B-12)	66	A
I-5	(B-13)	48	A
I-6	(B-14)	77	A
I-15	(B-15)	60	A
I-21	(B-16)	62	A
I-24	(B-17)	50	A
I-30	(B-2)	58	B
I-31	(B-18)	70	A
I-32	(B-19)	46	A
I-36	(B-20)	63	A
I-39	(B-21)	54	A
I-49	(B-22)	59	A
I-80	(B-23)	61	A

TABLE 3-continued

Compound No.	Coloring composition No.	Particle diameter of the coloring composition (nm)	Colored degree of the filter
I-81	(B-24)	49	A
I-82	(B-25)	61	A
I-83	(B-26)	65	A
I-84	(B-27)	59	A
I-85	(B-28)	56	A
I-14	(B-29)	28	A
I-27	(B-30)	29	A
I-87	(B-31)	65	A
I-88	(B-32)	59	A
I-89	(B-33)	71	A
I-90	(B-34)	53	A
I-91	(B-35)	26	A
I-92	(B-36)	28	A
H-1	(B-6)	88	C

[0466] As is evident from Table 3, the inks of the present invention had superior dispersion-stability. Particularly good were the inks using the dyes (I-3), (I-5), (I-6), (I-15), (I-21), (I-24), (I-31), (I-32), (I-36), (I-39), (I-49), (I-80), (I-81), (I-82), (I-83), (I-84), (I-85), (I-14), (I-27), (I-87), (I-88), (I-89), (I-90), (I-91), and (I-92), which were oil soluble dyes represented by the formula (IV-1), (IV-2), (IV-3a), (IV-3b), (IV-4) or (IV-5). It can be understood that the dyes (I-14), (I-27), (I-91), and (I-92), which were represented by the formula (IV-5), were preferable because of the small particle diameter of coloring compositions.

Example 7

[0467] This example was carried out in the same manner as in Preparation Example 2 except that the oil soluble dye (I-30) was replaced by each of dyes (I-5), (I-15), (I-21), (I-24), (I-39), (I-49), (I-80), (I-81), (I-82), (I-83), and (I-85), so as to prepare each of coloring compositions (B-41)-(B-51) whose solid content by percentage was 20%. Further, this example was carried out in the same manner as in Example 1 except that the coloring composition (B-1) was replaced by each of the coloring compositions (B-41)-(B-51), so as to prepare an ink for ink-jet. When an image was recorded on photo glossy paper (ink-jet paper (photo grade), made by Fuji Photo Film Co., Ltd.) by using the resultant ink and an ink-jet printer (PM-700C, made by Seiko Epson Corp.), the product was diluted with ion exchanged water so that the absorbance thereof would be 0.8-1.2. The visible absorption spectrum thereof was evaluated. The ink using any one of the products (B-41)-(B-51) had a small absorption at 600 nm, and caused slight bleeding at the time of printing on paper. Thus, the ink was preferable.

Example 8

[0468] This example was carried out in the same manner as in Preparation Example 2 except that the oil soluble dye (I-30) was replaced by each of dyes (I-6), (I-87), (I-88), (I-89) and (I-90), so as to prepare each of coloring compositions (B-61)-(B-65) whose solid content by percentage was 20%. The same manner as in Example 1 was carried out except that the coloring composition (B-1) was replaced by each of the coloring compositions (B-61)-(B-65), so as to prepare an ink for ink-jet. When an image was recorded on photo glossy paper (ink-jet paper (photo grade), made by