FIG. 1

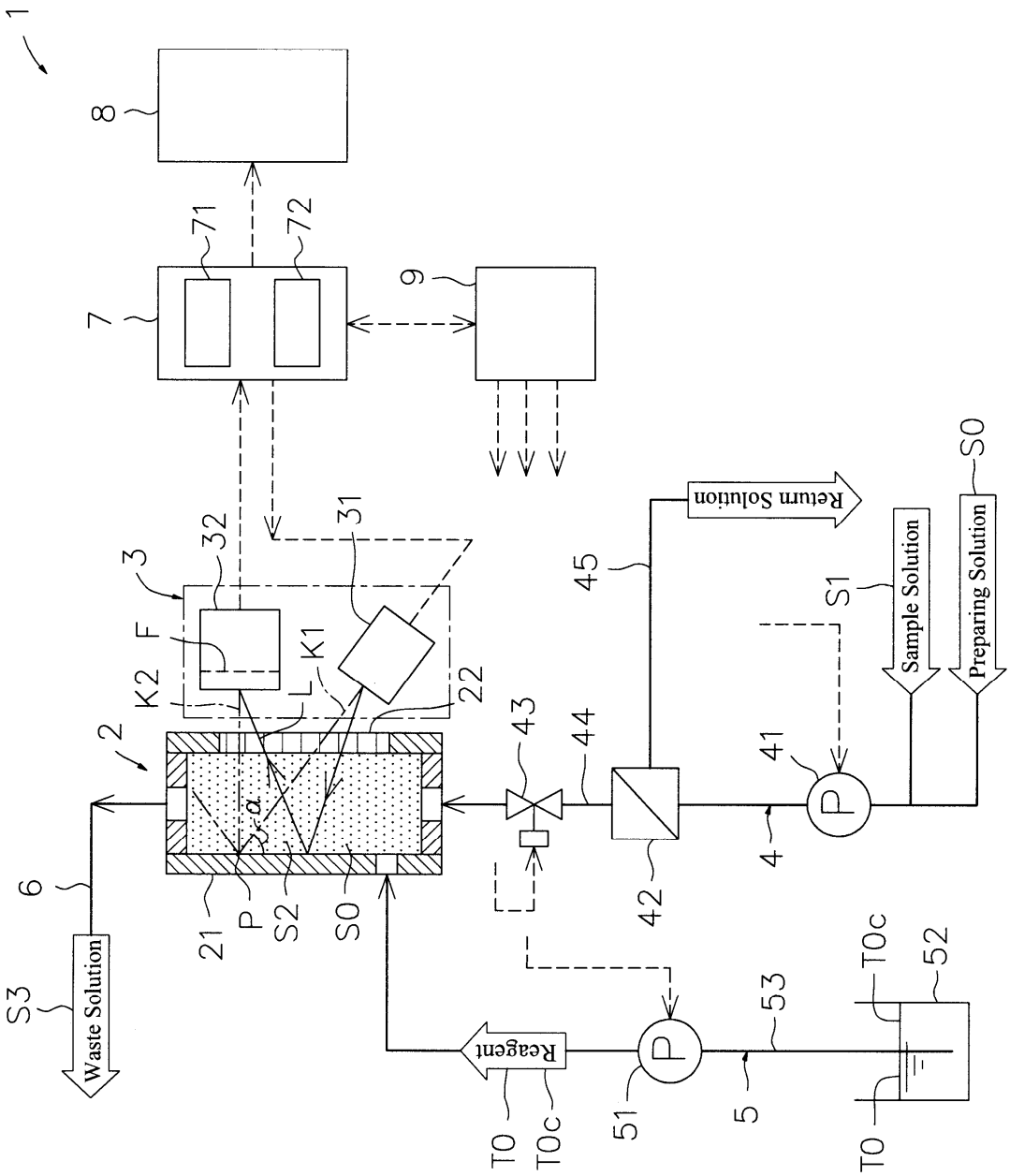

1
8
7
71
72
9
3
32
31
F
K2
K1
L
22
2
α
21
P
S2
S0
6
S3
Waste Solution
43
44
45
Return Solution
41
S1
Sample Solution
S0
Preparing Solution
42
4
Reagent
T0
T0c
51
5
53
T0c
52
T0

FIG. 2

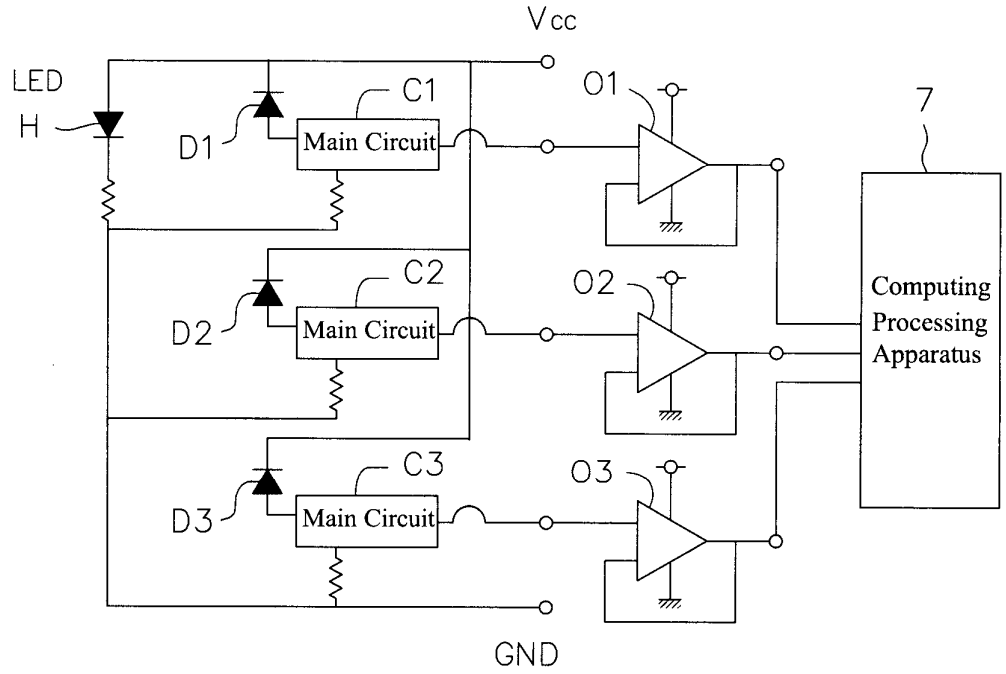

Vcc
LED
H
D1
C1
Main Circuit
O1
7
D2
C2
Main Circuit
O2
Computing
Processing
Apparatus
D3
C3
Main Circuit
O3
GND

FIG. 3A

WELLCLEAN Concentration (mg/L)	Absorbance by Concentration Measuring Apparatus		
	Red Region Component Light	Green Region Component Light	Blue Region Component Light
0	0.000	0.000	0.000
20	0.021	0.026	0.033
40	0.046	0.057	0.066
60	0.075	0.093	0.099
80	0.106	0.135	0.131
100	0.145	0.183	0.164

FIG. 3B

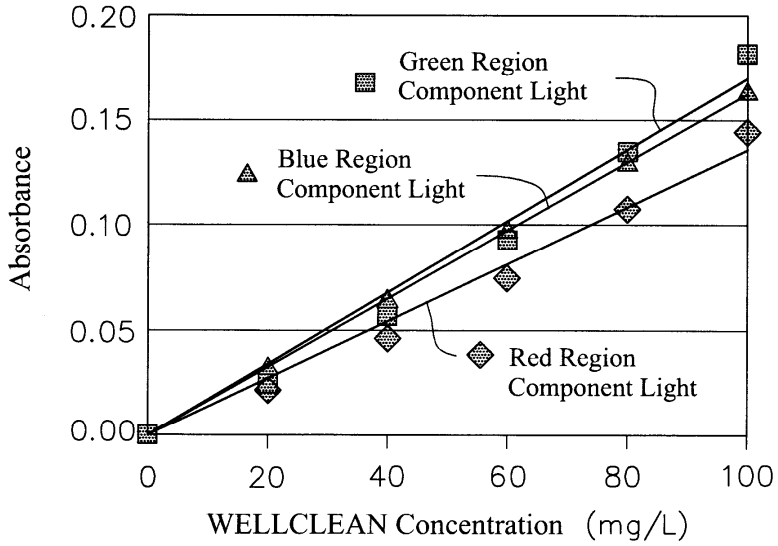


FIG. 4A

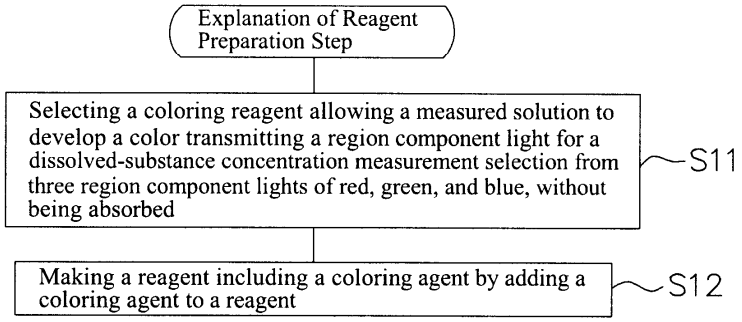

Explanation of Reagent Preparation Step
Selecting a coloring reagent allowing a measured solution to develop a color transmitting a region component light for a dissolved-substance concentration measurement selection from three region component lights of red, green, and blue, without being absorbed
S11
Making a reagent including a coloring agent by adding a coloring agent to a reagent
S12

FIG. 4B

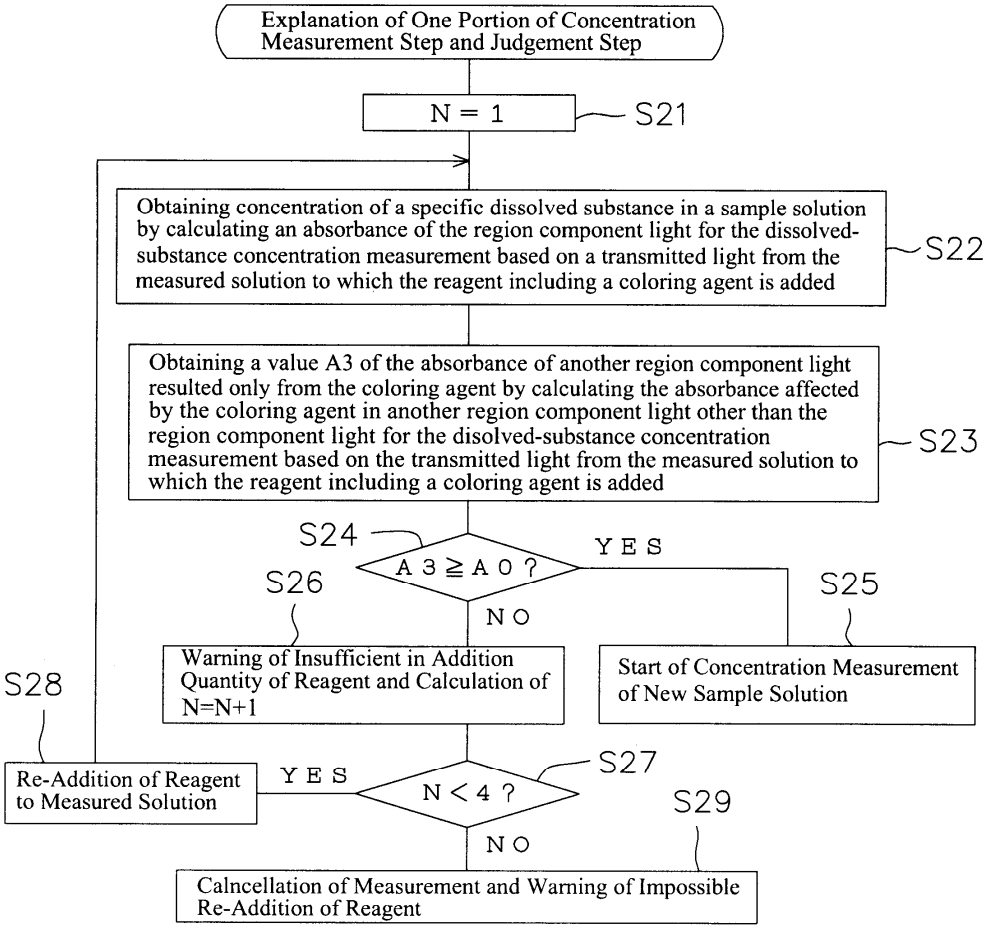

Explanation of One Portion of Concentration Measurement Step and Judgement Step
N = 1
S21
Obtaining concentration of a specific dissolved substance in a sample solution by calculating an absorbance of the region component light for the dissolved-substance concentration measurement based on a transmitted light from the measured solution to which the reagent including a coloring agent is added
S22
Obtaining a value A3 of the absorbance of another region component light resulted only from the coloring agent by calculating the absorbance affected by the coloring agent in another region component light other than the region component light for the disolved-substance concentration measurement based on the transmitted light from the measured solution to which the reagent including a coloring agent is added
S23
S24
A 3 ≧ A 0 ?
YES
S25
Start of Concentration Measurement of New Sample Solution
NO
S26
Warning of Insufficient in Addition Quantity of Reagent and Calculation of N=N+1
S27
N < 4 ?
YES
S28
Re-Addition of Reagent to Measured Solution
NO
S29
Calncellation of Measurement and Warning of Impossible Re-Addition of Reagent

FIG. 5

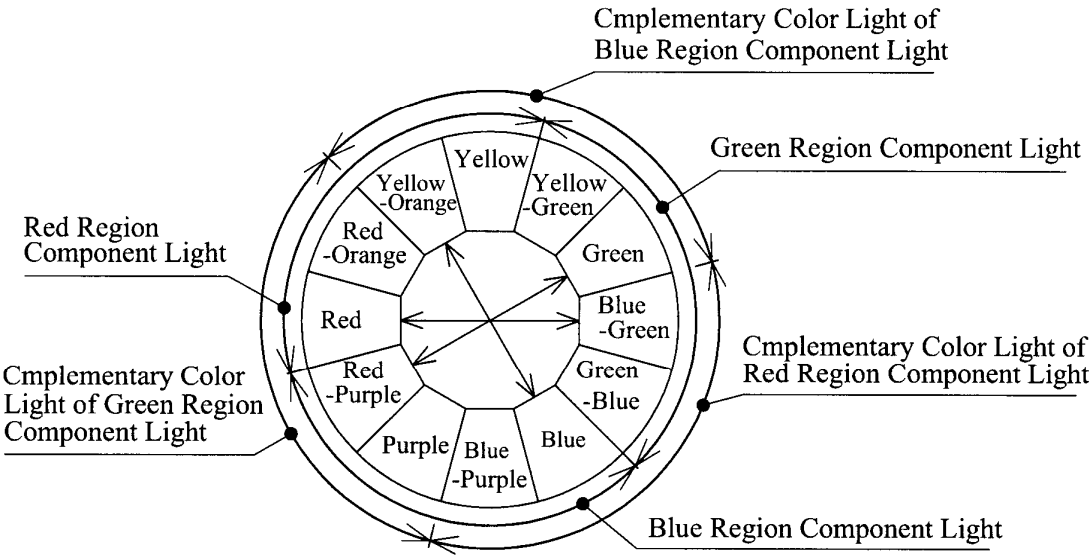

Cmplementary Color Light of
Blue Region Component Light
Green Region Component Light
Red Region
Component Light
Cmplementary Color Light of
Red Region Component Light
Cmplementary Color
Light of Green Region
Component Light
Blue Region Component Light
Yellow
Yellow
-Orange
Yellow
-Green
Red
-Orange
Green
Red
Blue
-Green
Red
-Purple
Green
-Blue
Purple
Blue
-Purple
Blue

FIG. 6A

Addition Quantity of Reagent Including Coloring Agent : 0. 2 mL

WELLCLEAN Concentration (mg/L)	Absorbance by Concentration Measuring Apparatus			Sum of Absorbances of Red and Green, Two Region Component Lights		
	Red Region Component Light A	Green Region Component Light B	Blue Region Component Light C	Resulted from WELLCLEAN and Coloring Agent D=A+B	Resulted Only from WELLCLEAN E	Resulted Only from Coloring Agent F=D−E
0	0.044	0.040	0.000	0.084	0.000	0.084
20	0.065	0.066	0.033	0.131	0.047	0.084
40	0.090	0.097	0.066	0.187	0.103	0.084
60	0.119	0.133	0.099	0.252	0.168	0.084
80	0.152	0.175	0.132	0.327	0.241	0.084
100	0.189	0.223	0.165	0.412	0.328	0.084

FIG. 6B

Addition Quantity of Reagent Including Coloring Agent : 0. 1 mL

WELLCLEAN Concentration (mg/L)	Absorbance by Concentration Measuring Apparatus			Sum of Absorbances of Red and Green, Two Region Component Lights		
	Red Region Component Light A	Green Region Component Light B	Blue Region Component Light C	Resulted from WELLCLEAN and Coloring Agent D=A+B	Resulted Only from WELLCLEAN E	Resulted Only from Coloring Agent F=D−E
0	0.022	0.020	0.000	0.042	0.000	0.042
20	0.043	0.046	0.033	0.089	0.047	0.042
40	0.068	0.077	0.066	0.145	0.103	0.042
60	0.097	0.113	0.099	0.210	0.168	0.042
80	0.130	0.155	0.132	0.285	0.243	0.042
100	0.167	0.203	0.164	0.370	0.328	0.042

FIG. 6C

Addition Quantity of Reagent Including Coloring Agent : 0. 0 5 mL

WELLCLEAN Concentration (mg/L)	Absorbance by Concentration Measuring Apparatus			Sum of Absorbances of Red and Green, Two Region Component Lights		
	Red Region Component Light A	Green Region Component Light B	Blue Region Component Light C	Resulted from WELLCLEAN and Coloring Agent D=A+B	Resulted Only from WELLCLEAN E	Resulted Only from Coloring Agent F=D−E
0	0.011	0.010	0.000	0.021	0.000	0.021
20	0.032	0.036	0.033	0.068	0.047	0.021
40	0.057	0.067	0.066	0.124	0.103	0.021
60	0.071	0.084	0.082	0.155	0.134	0.021
80	0.071	0.084	0.082	0.155	0.134	0.021
100	0.071	0.084	0.082	0.155	0.134	0.021

FIG. 7

Addition Quantity of Reagent Including Coloring Agent (mL)	Absorbance by Concentration Measuring Apparatus			Sum of Absorbances of Red and Green, Two Region Component Lights Resulted Only from Coloring Agent
	Blue Region Component Light	Red Region Component Light	Green Region Component Light	
0.05	0.000	0.011	0.010	0.021
0.10	0.001	0.022	0.020	0.042
0.15	0.001	0.033	0.030	0.063
0.20	0.002	0.044	0.040	0.084
0.25	0.002	0.055	0.050	0.105
0.30	0.003	0.066	0.060	0.126

FIG. 8

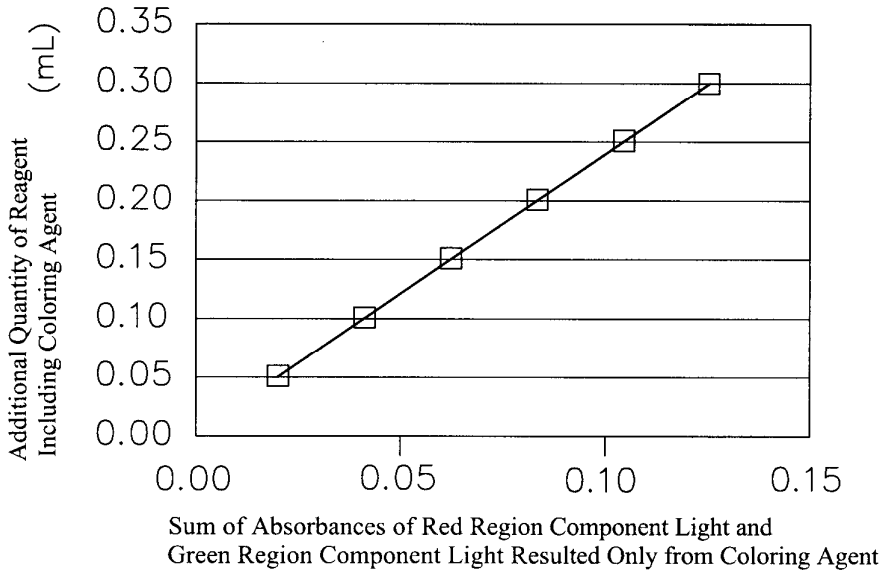


FIG. 9

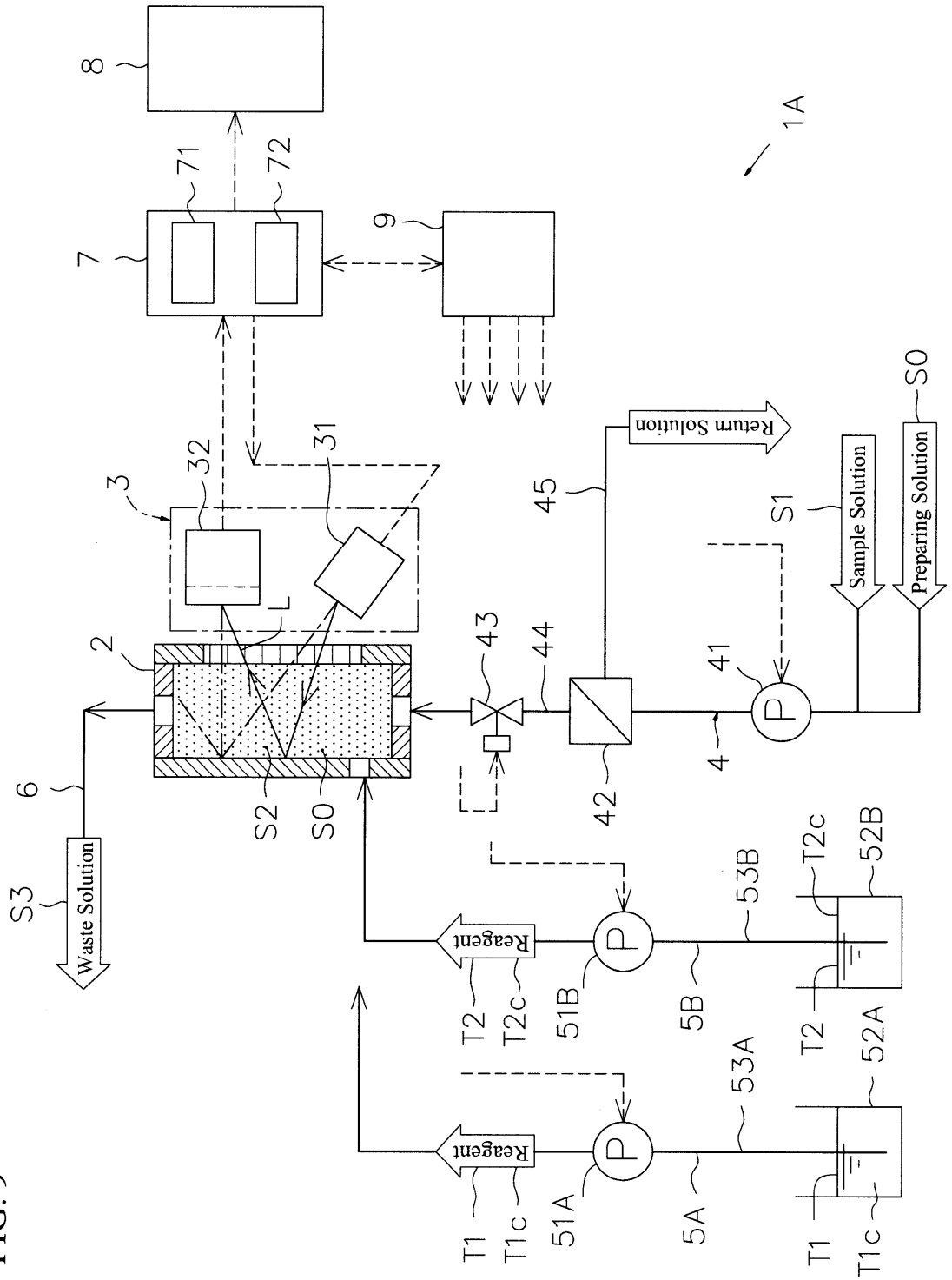

1A
8
7
71
72
9
3
32
31
L
2
6
S3
Waste Solution
S2
S0
43
44
45
Return Solution
41
S1
Sample Solution
Preparing Solution
S0
42
4
P
Reagent
T2
T2c
51B
5B
53B
T2c
52B
T2
52A
Reagent
T1
T1c
51A
5A
53A
T1
T1c

FIG. 10A

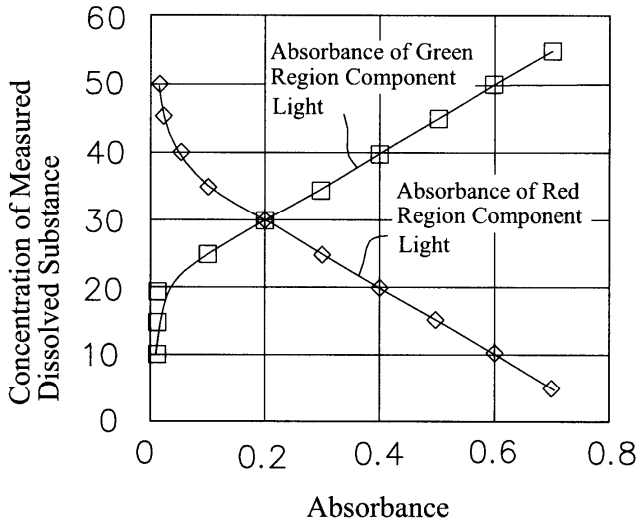


FIG. 10B

Absorbance of Red Region Component Light	Absorbance of Green Region Component Light	Concentration of Measured Dissolved Substance
0.7		5
0.6	0.01	10
0.5	0.01	15
0.4	0.01	20
0.3	0.1	25
0.2	0.2	30
0.1	0.3	35
0.05	0.4	40
0.02	0.5	45
0.01	0.6	50
	0.7	55