

FIG. 1

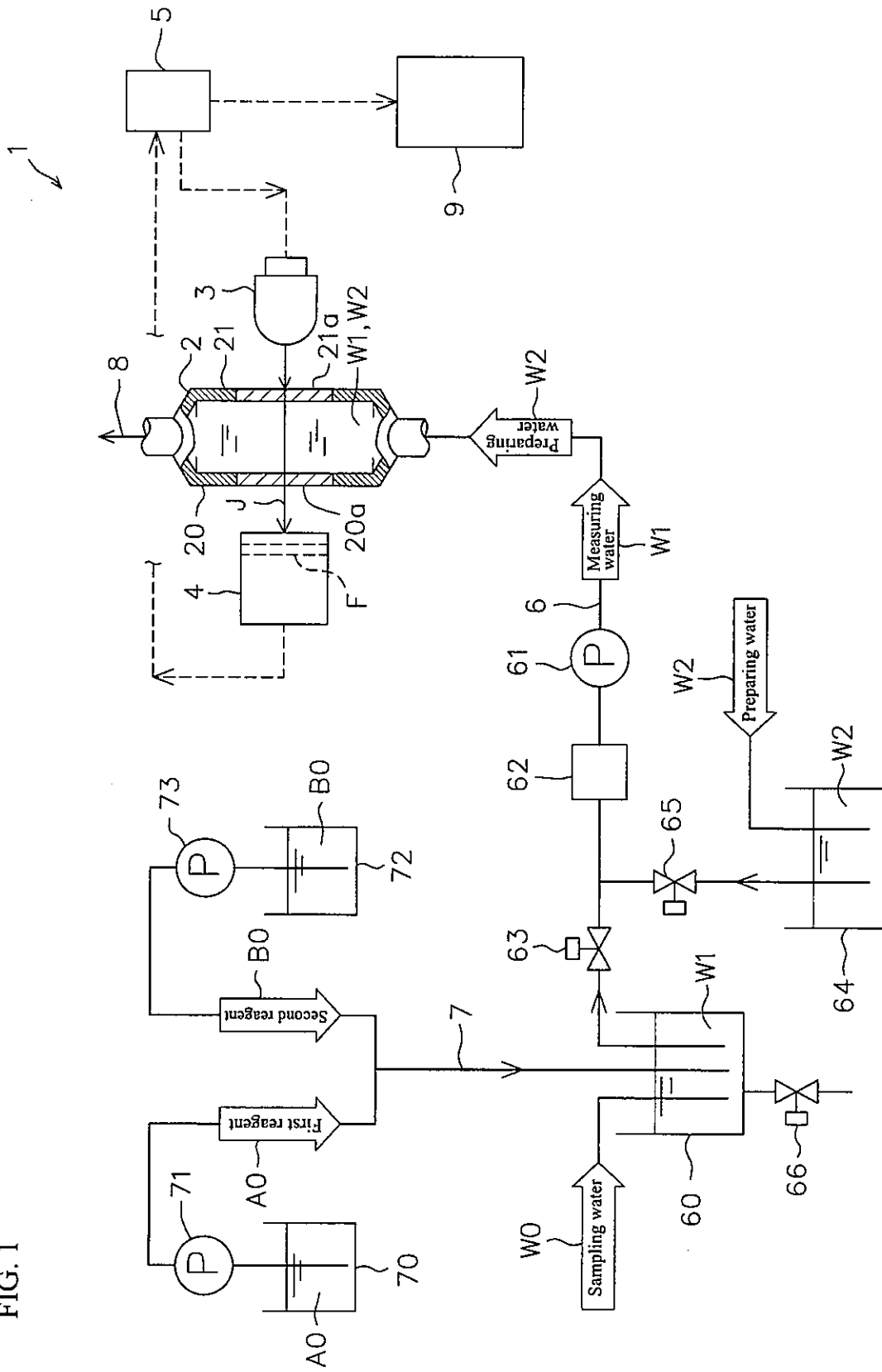


FIG. 2

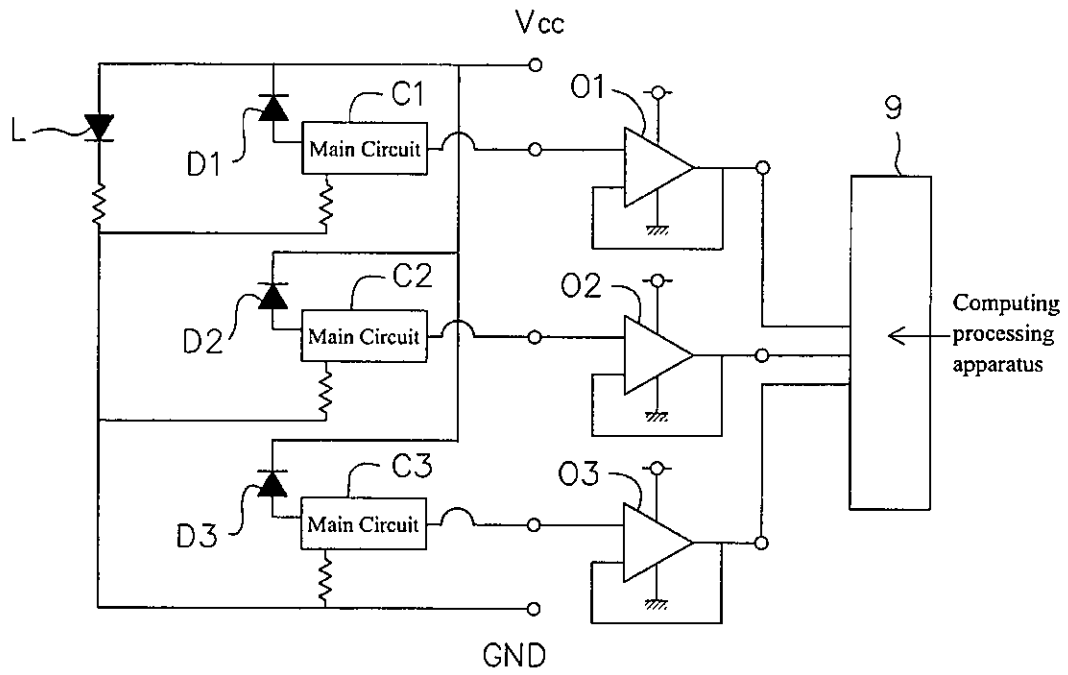


FIG. 3

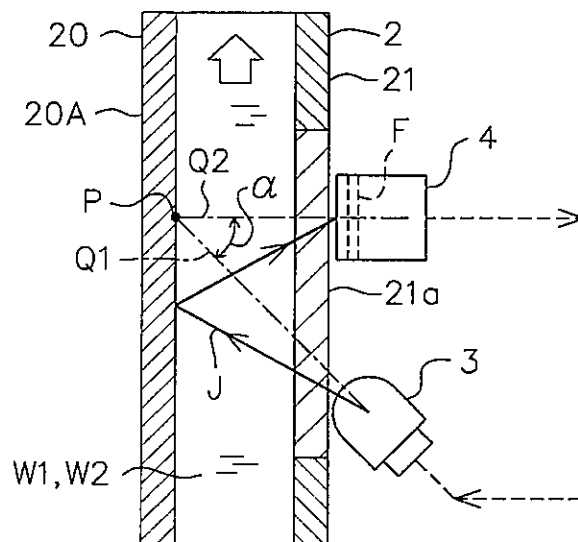


FIG. 4

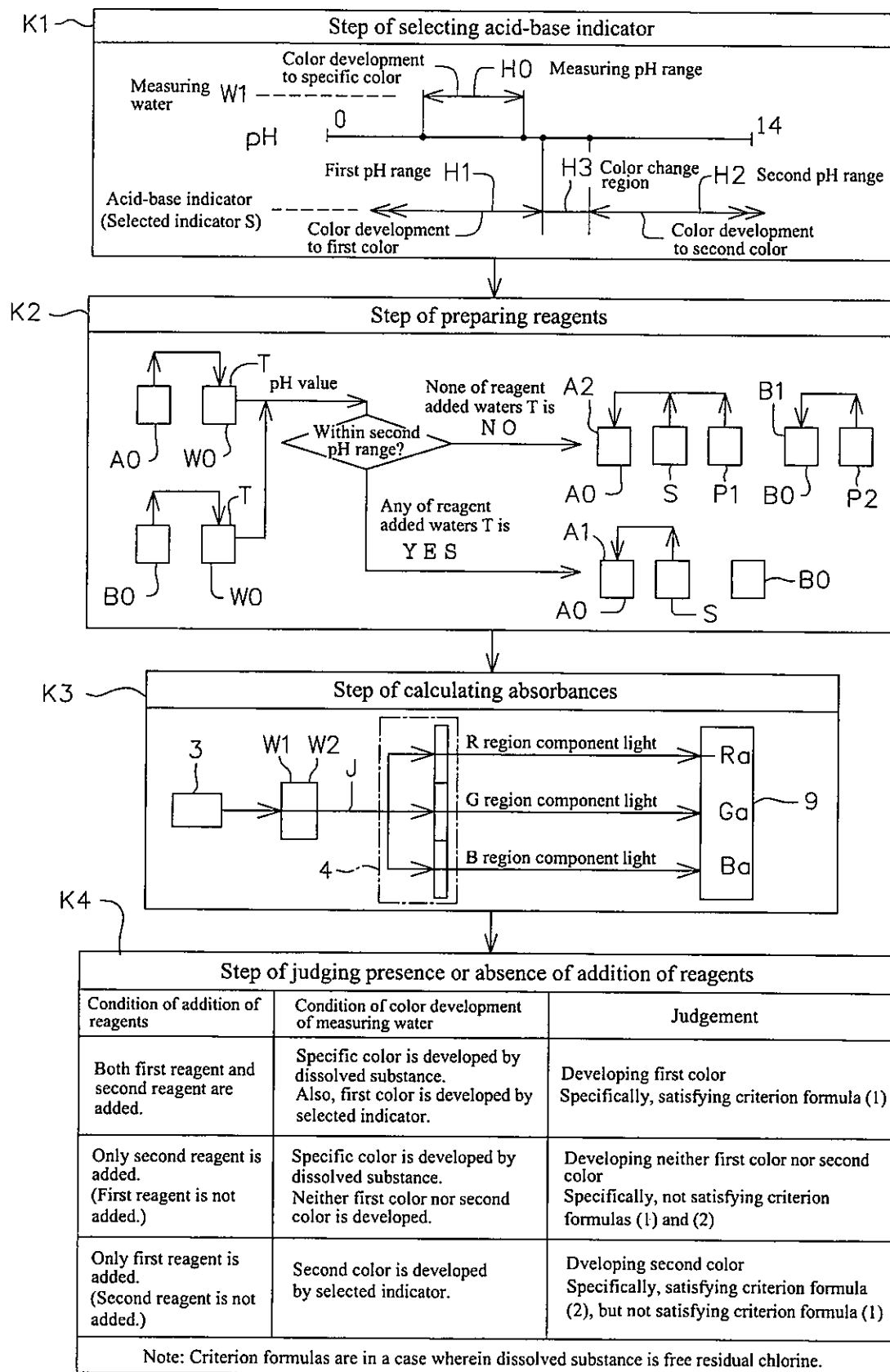


FIG. 5

Data No	Case	Free residual chlorine concentration (mg/L)	Reagent addition concentration (mg/10mL)		Value of absorbances			Presence or absence of selected indicator	Criterion formula (I) related to value of 2Ba - Ga
			First reagent (Buffer solution)	Second reagent	R Region component light Ra	G Region component light Ga	B Region component light Ba		
1	Preparing water	0.0	0	0	0.00	0.00	0.00	—	0.00
2	Case without indicator	0.0	0.2	0.2	0.00	0.00	0.00	Absence	0.00
3		0.6	0.2	0.2	0.01	0.17	0.11	Absence	0.05
4		1.1	0.2	0.2	0.02	0.33	0.18	Absence	0.03
5		1.6	0.2	0.2	0.02	0.44	0.22	Absence	0.00
6		2.0	0.2	0.2	0.03	0.55	0.27	Absence	-0.01
7	Case with indicator	0.0	0.2	0.2	0.02	0.08	0.22	Presence	0.36
8		0.6	0.2	0.2	0.03	0.23	0.30	Presence	0.37
9		1.1	0.2	0.2	0.03	0.37	0.36	Presence	0.35
10		1.6	0.2	0.2	0.03	0.48	0.40	Presence	0.32
11		2.0	0.2	0.2	0.03	0.60	0.46	Presence	0.32
12	Case without adding first reagent	0.0	0	0.2	0.00	0.00	0.01	Presence	0.01
13		0.6	0	0.2	0.02	0.19	0.11	Presence	0.03
14		1.1	0	0.2	0.03	0.34	0.18	Presence	0.03
15		1.6	0	0.2	0.02	0.41	0.23	Presence	0.06
16		2.0	0	0.2	0.03	0.44	0.26	Presence	0.08
17	Case without adding second reagent	0.0	0.2	0	0.44	0.41	0.10	Presence	-0.22
18		0.6	0.2	0	0.45	0.42	0.09	Presence	-0.23
19		1.1	0.2	0	0.42	0.39	0.10	Presence	-0.19
20		1.6	0.2	0	0.46	0.43	0.09	Presence	-0.25
21		2.0	0.2	0	0.40	0.34	0.08	Presence	-0.19

FIG. 6

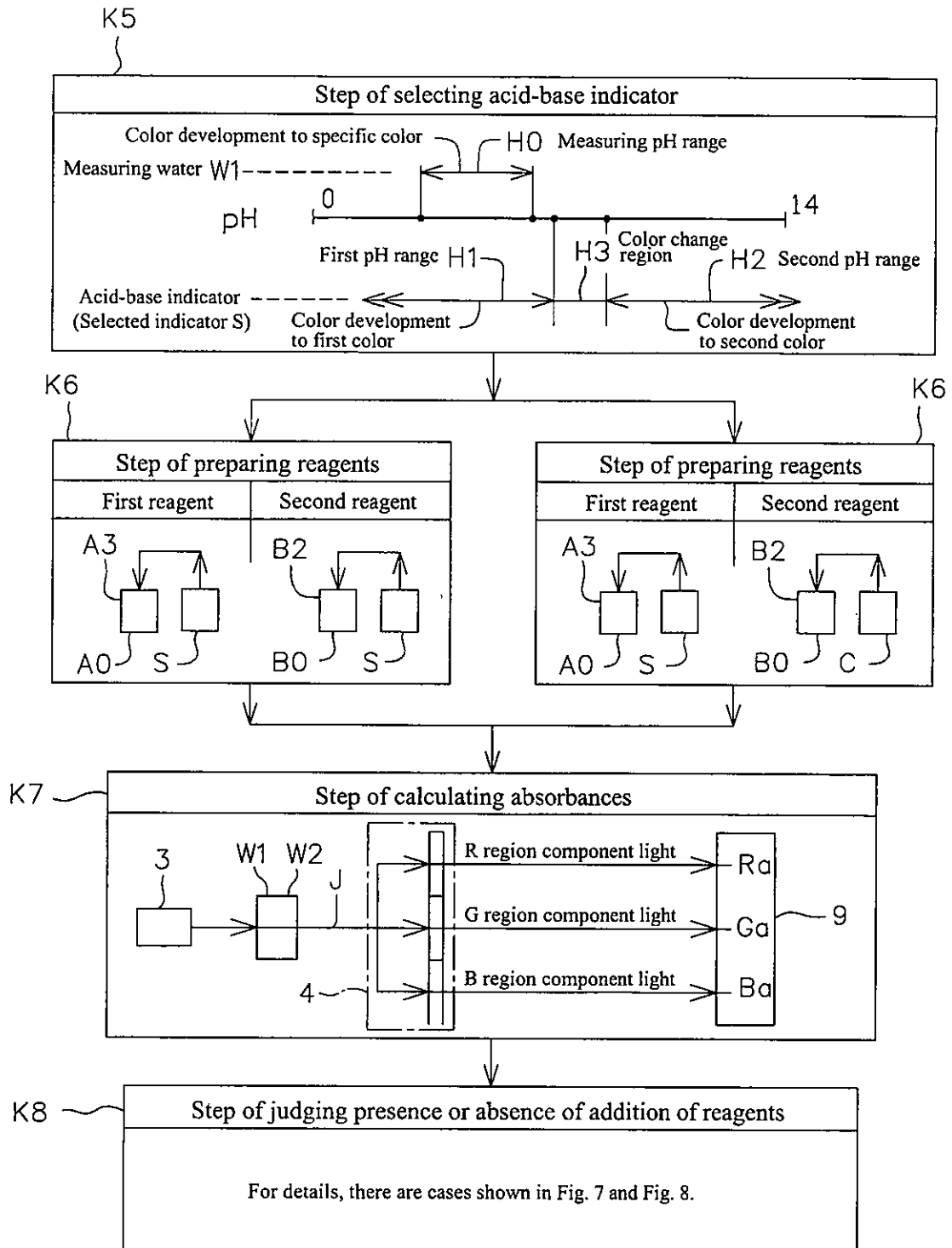


FIG. 7

K8

Step of judging presence or absence of addition of reagents Case wherein selected indicator is added to first reagent and second reagent		
Condition of addition of reagents	Condition of color development of measuring water	Judgement
Both first reagent and second reagent are added.	Specific color is developed by dissolved substance. Also, first color is developed deeply (strongly) by selected indicator of first reagent and second reagent.	Developing deep (strong) first color Specifically, just have to satisfy criterion formula (3)
Only one of first reagent or second reagent is added.	pH value of measuring water: First pH range First color is developed by selected indicator. pH value of measuring water: Second pH range Second color is developed by selected indicator. pH value of measuring water: Color change region Intermediate color between first color and second color is developed by selected indicator.	Developing no deep (strong) first color Specifically, not satisfying criterion formula (3)
Both first reagent and second reagent are added. Since pH value of sample water is unusual, pH value of measuring water is within second pH range.	Specific color is developed by dissolved substance. Also, second color is developed deeply (strongly) by selected indicator of first reagent and second reagent.	Developing deep (strong) second color
Note: Criterion formulas are in a case wherein dissolved substance is phosphate ion.		

FIG. 8

K8

Step of judging presence or absence of addition of reagents Case wherein selected indicator is added to first reagent and coloring agent is added to second reagent		
Condition of addition of reagents	Condition of color development of measuring water	Judgement
Both first reagent and second reagent are added.	Specific color is developed by dissolved substance. Also, first color is developed deeply (strongly) by selected indicator and coloring agent.	Developing deep (strong) first color Specifically, satisfying criterion formula (3)
Only one of first reagent or second reagent is added.	pH value of measuring water: First pH range First color is developed by selected indicator or coloring agent. pH value of measuring water: Second pH range Second color is developed by selected indicator, or first color is developed by coloring agent. pH value of measuring water: Color change region Intermediate color between first color and second color is developed by selected indicator, or first color is developed by coloring agent.	Developing no deep (strong) first color Specifically, not satisfying criterion formula (3)
Both first reagent and second reagent are added. Since pH value of sample water is unusual, pH value of measuring water is within second pH range.	Specific color is developed by dissolved substance. Also, second color is developed by selected indicator of first reagent, and first color is developed by coloring agent of second reagent.	
Only one of first reagent or second reagent is added. Since pH value of sample water is unusual, pH value of measuring water is within second pH range.	Second color is developed by selected indicator of first reagent, or first color is developed by coloring agent of second reagent.	
Note: Criterion formulas is in a case wherein dissolved substance is phosphate ion.		

FIG. 9

Data N o	Case	Phosphate ion concentration (mg/L)	Reagent addition concentration (mg/10mL)		Value of absorbances			Presence or absence of coloring agent	Criterion formula (3) related to value of Ba - 0.34Ra	Criterion formula (4) related to value of Ga - 0.66Ra	pH of measuring water and the like
			First reagent	Second reagent	R Region component light	G Region component light	B Region component light				
1	Preparing water	0.0	0	0	0.00	0.00	0.00	—	0.00	0.00	Neutrality
2	Case without coloring agent	0.0	0.2	0.2	0.00	0.00	0.00	Absence	0.00	0.00	p H < 6.8
3		1.0	0.2	0.2	0.07	0.04	0.02	Absence	0.00	-0.01	p H < 6.8
4		2.0	0.2	0.2	0.15	0.09	0.05	Absence	0.00	-0.01	p H < 6.8
5		3.0	0.2	0.2	0.22	0.15	0.07	Absence	0.00	0.00	p H < 6.8
6		4.0	0.2	0.2	0.30	0.19	0.10	Absence	0.00	0.00	p H < 6.8
7	Case with coloring agent	5.0	0.2	0.2	0.35	0.24	0.12	Absence	0.00	0.01	p H < 6.8
8		0.0	0.2	0.2	0.00	0.06	0.17	Presence	0.17	0.06	p H < 6.8
9		1.0	0.2	0.2	0.08	0.10	0.20	Presence	0.17	0.05	p H < 6.8
10		2.0	0.2	0.2	0.15	0.15	0.23	Presence	0.17	0.05	p H < 6.8
11		3.0	0.2	0.2	0.22	0.21	0.25	Presence	0.17	0.06	p H < 6.8
12	Case without adding second reagent	4.0	0.2	0.2	0.30	0.25	0.27	Presence	0.17	0.05	p H < 6.8
13		5.0	0.2	0.2	0.36	0.30	0.29	Presence	0.17	0.06	p H < 6.8
14		0.0	0	0.2	0.00	0.01	0.10	Presence	0.10	0.01	p H < 6.8
15		1.0	0	0.2	0.00	0.01	0.10	Presence	0.10	0.01	p H < 6.8
16		2.0	0	0.2	0.00	0.01	0.10	Presence	0.10	0.01	p H < 6.8
17	Case without adding first reagent	3.0	0	0.2	0.00	0.01	0.10	Presence	0.10	0.01	p H < 6.8
18		4.0	0	0.2	0.00	0.01	0.10	Presence	0.10	0.01	p H < 6.8
19		5.0	0	0.2	0.00	0.01	0.10	Presence	0.10	0.01	p H < 6.8
20		0.0	0.2	0	0.00	0.00	0.08	Presence	0.08	0.00	p H < 6.8
21		1.0	0.2	0	0.00	0.00	0.08	Presence	0.08	0.00	p H < 6.8
22	Case without adding first reagent	2.0	0.2	0	0.00	0.00	0.08	Presence	0.08	0.00	p H < 6.8
23		3.0	0.2	0	0.00	0.00	0.08	Presence	0.08	0.00	p H < 6.8
24		4.0	0.2	0	0.00	0.01	0.09	Presence	0.09	0.01	p H < 6.8
25		5.0	0.2	0	0.00	0.01	0.09	Presence	0.09	0.01	p H < 6.8

FIG. 10

Data No	Case	Phosphate ion concentration (mg/L)	Reagent addition concentration (mg/10mL)		Value of absorbances			Presence or absence of coloring agent	Criterion formula (3) related to value of Ba - 0.34Ra	Criterion formula (4) related to value of Ga - 0.66Ra	pH of measuring water and the like
			First reagent	Second reagent	R Region component light	G Region component light	B Region component light				
26	Alkaline case without adding second reagent	0.0	0	0.2	0.01	0.45	0.03	Presence	0.03	0.44	pH > 8.4
27		1.0	0	0.2	0.02	0.44	0.04	Presence	0.03	0.43	pH > 8.4
28		2.0	0	0.2	0.02	0.44	0.03	Presence	0.02	0.43	pH > 8.4
29		3.0	0	0.2	0.01	0.45	0.04	Presence	0.04	0.44	pH > 8.4
30		4.0	0	0.2	0.02	0.44	0.04	Presence	0.03	0.43	pH > 8.4
31		5.0	0	0.2	0.02	0.44	0.04	Presence	0.03	0.43	pH > 8.4
32	Alkaline case with coloring agent	0.0	0.2	0.2	0.02	0.44	0.11	Presence	0.11	0.43	pH > 8.4
33		1.0	0.2	0.2	0.09	0.48	0.14	Presence	0.11	0.42	pH > 8.4
34		2.0	0.2	0.2	0.17	0.54	0.17	Presence	0.11	0.42	pH > 8.4
35		3.0	0.2	0.2	0.24	0.59	0.19	Presence	0.11	0.43	pH > 8.4
36		4.0	0.2	0.2	0.32	0.64	0.21	Presence	0.11	0.43	pH > 8.4
37		5.0	0.2	0.2	0.38	0.68	0.23	Presence	0.11	0.44	pH > 8.4