

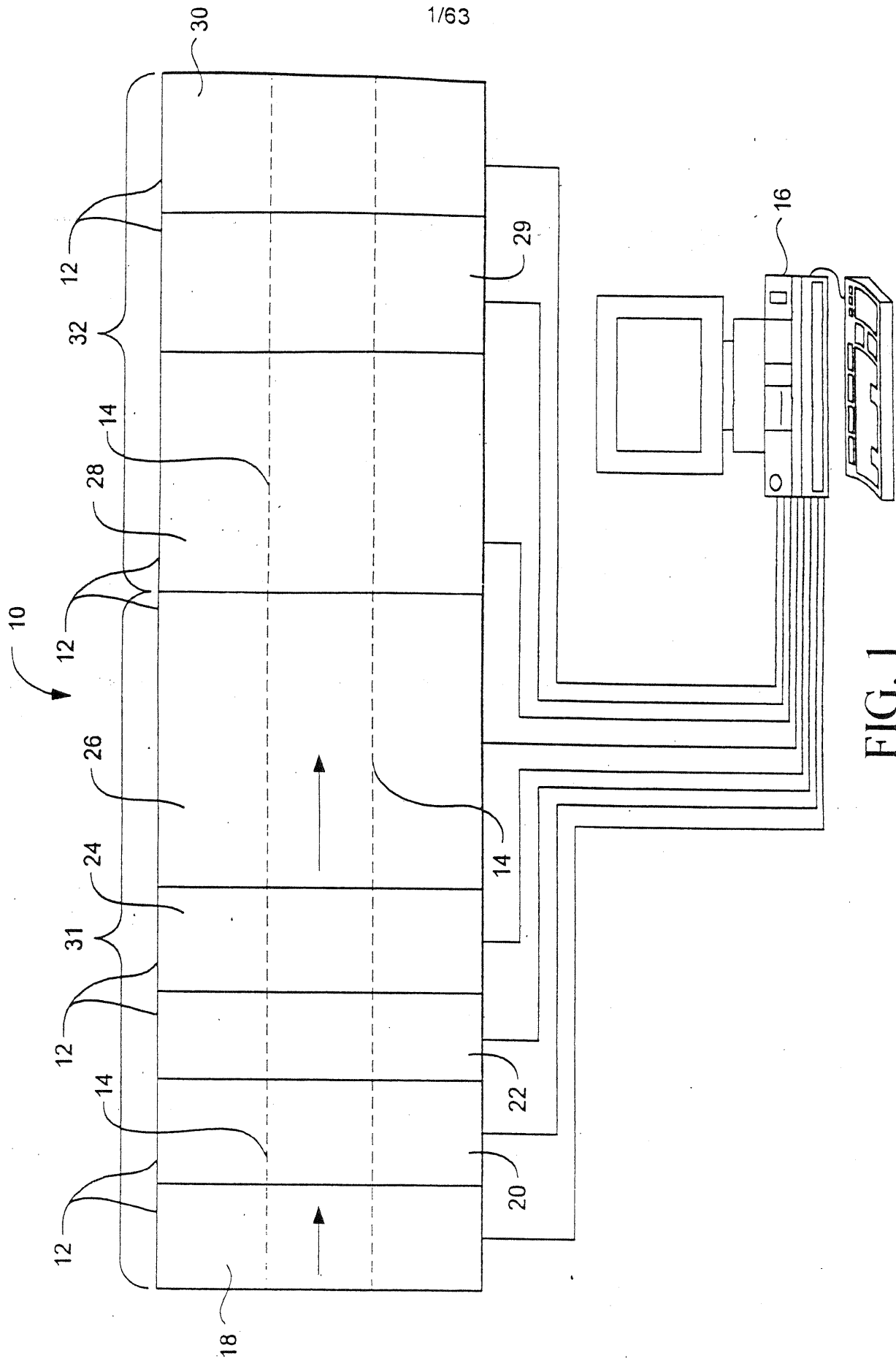


FIG. 1

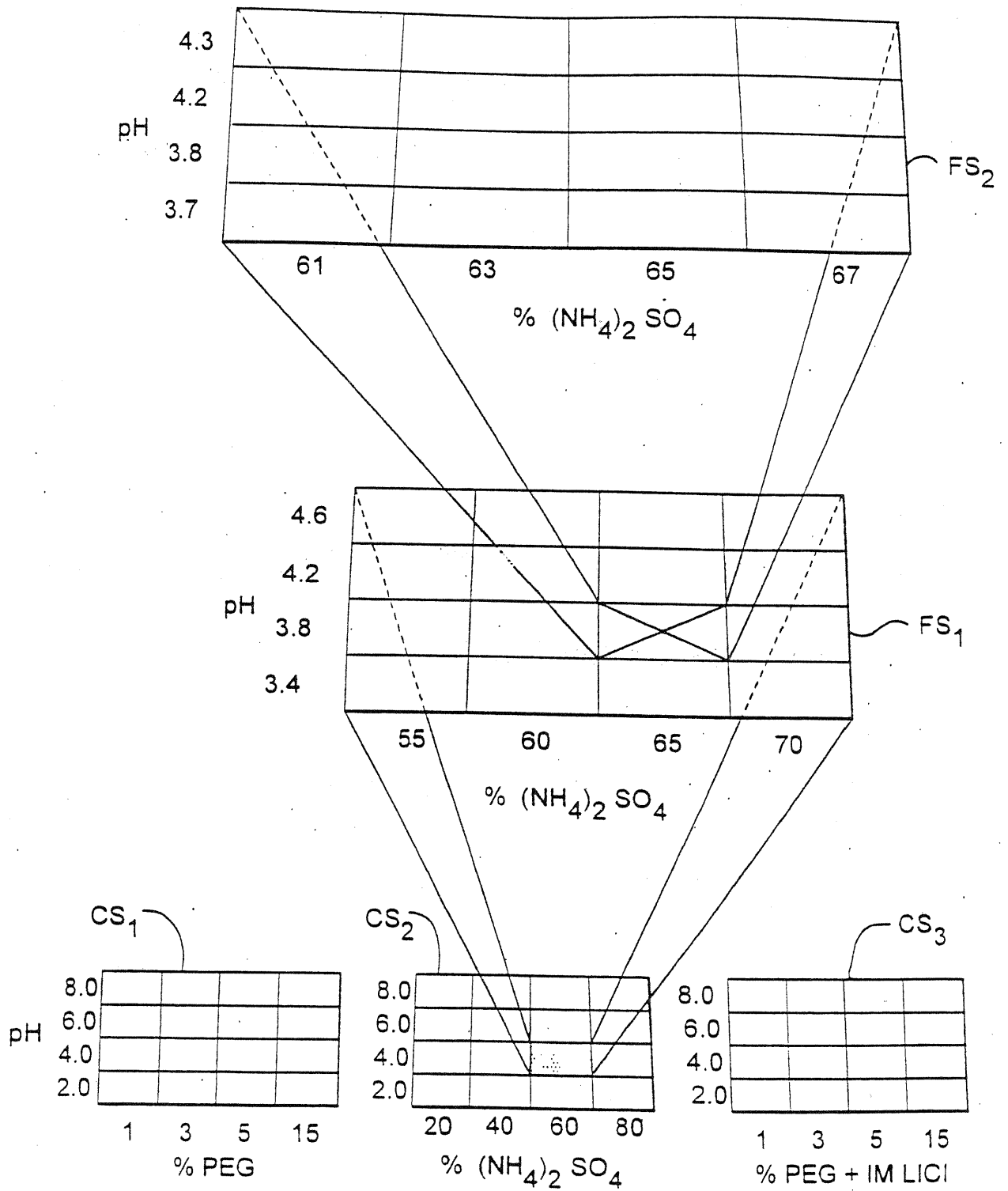


FIG. 2

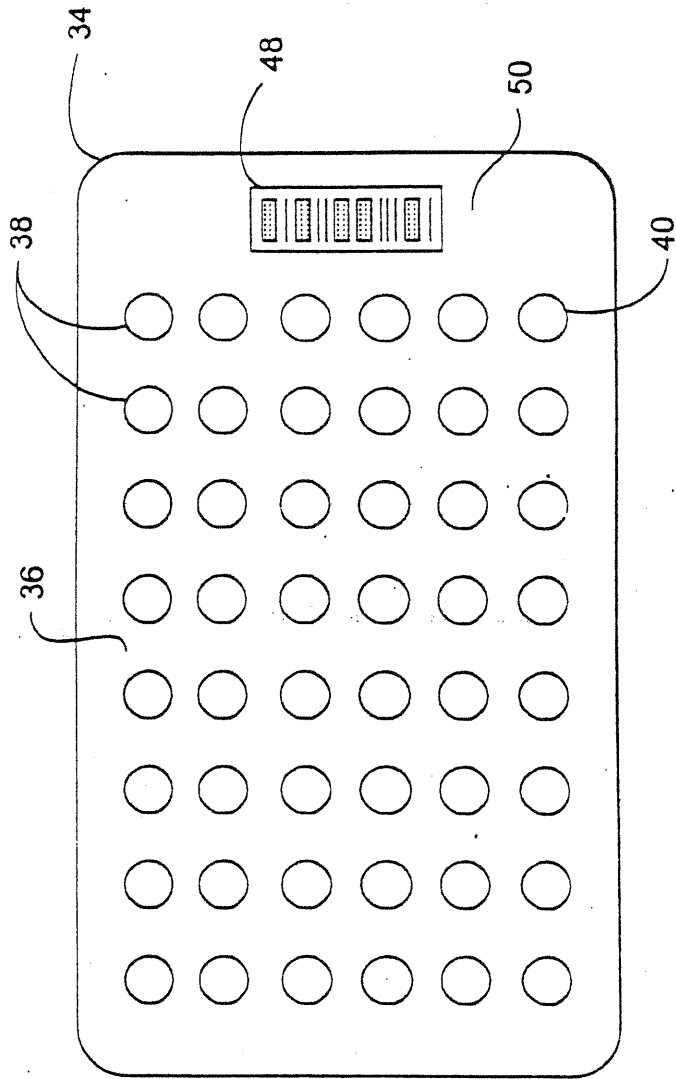


FIG. 3A

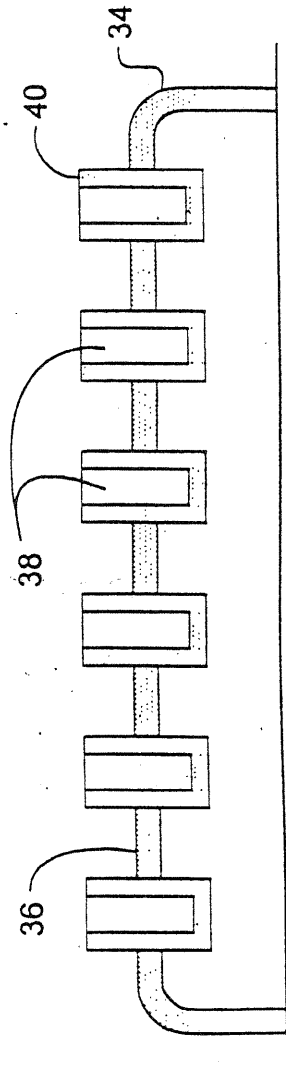


FIG. 3B

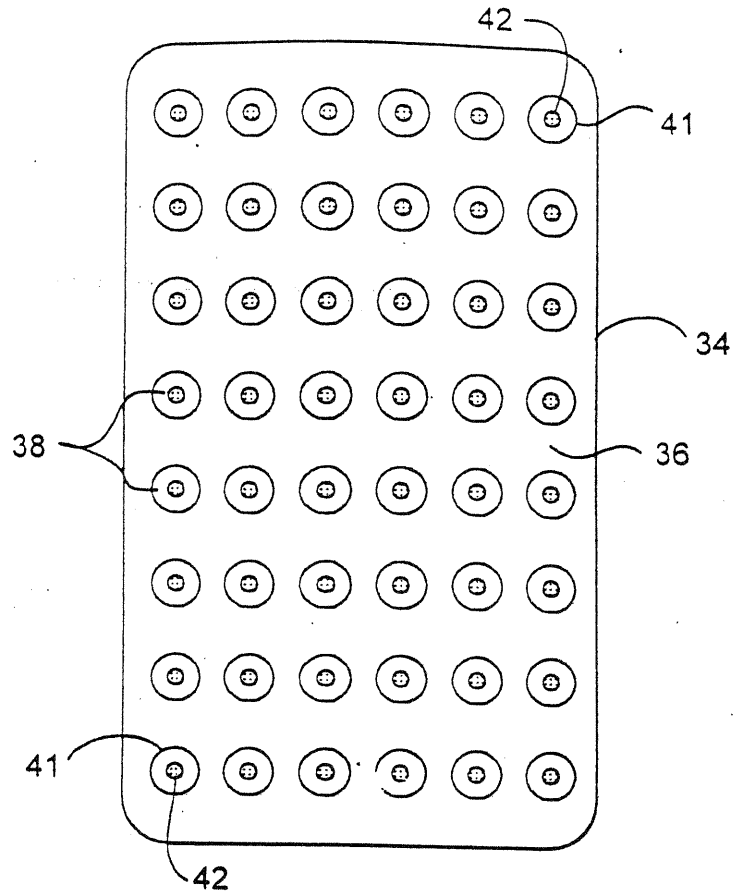


FIG. 3C

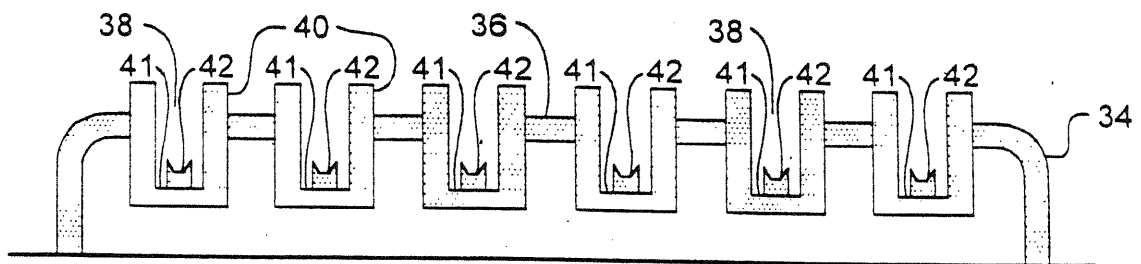


FIG. 3D

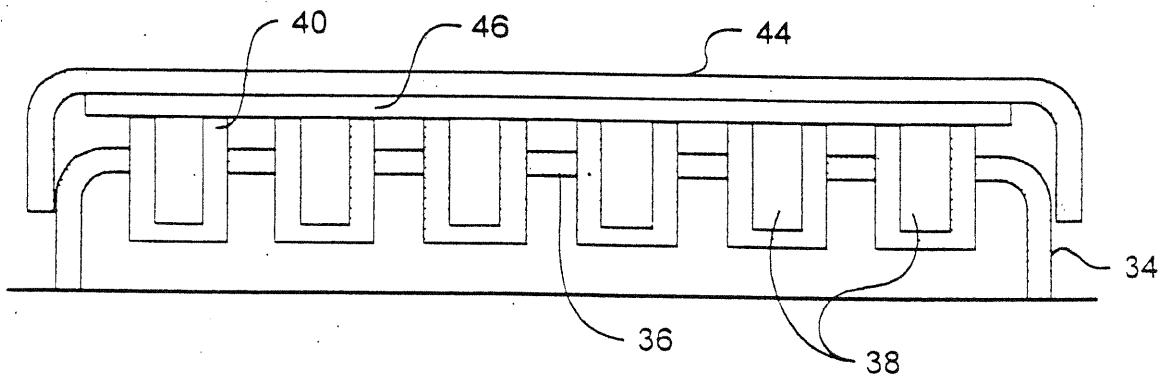


FIG. 3E

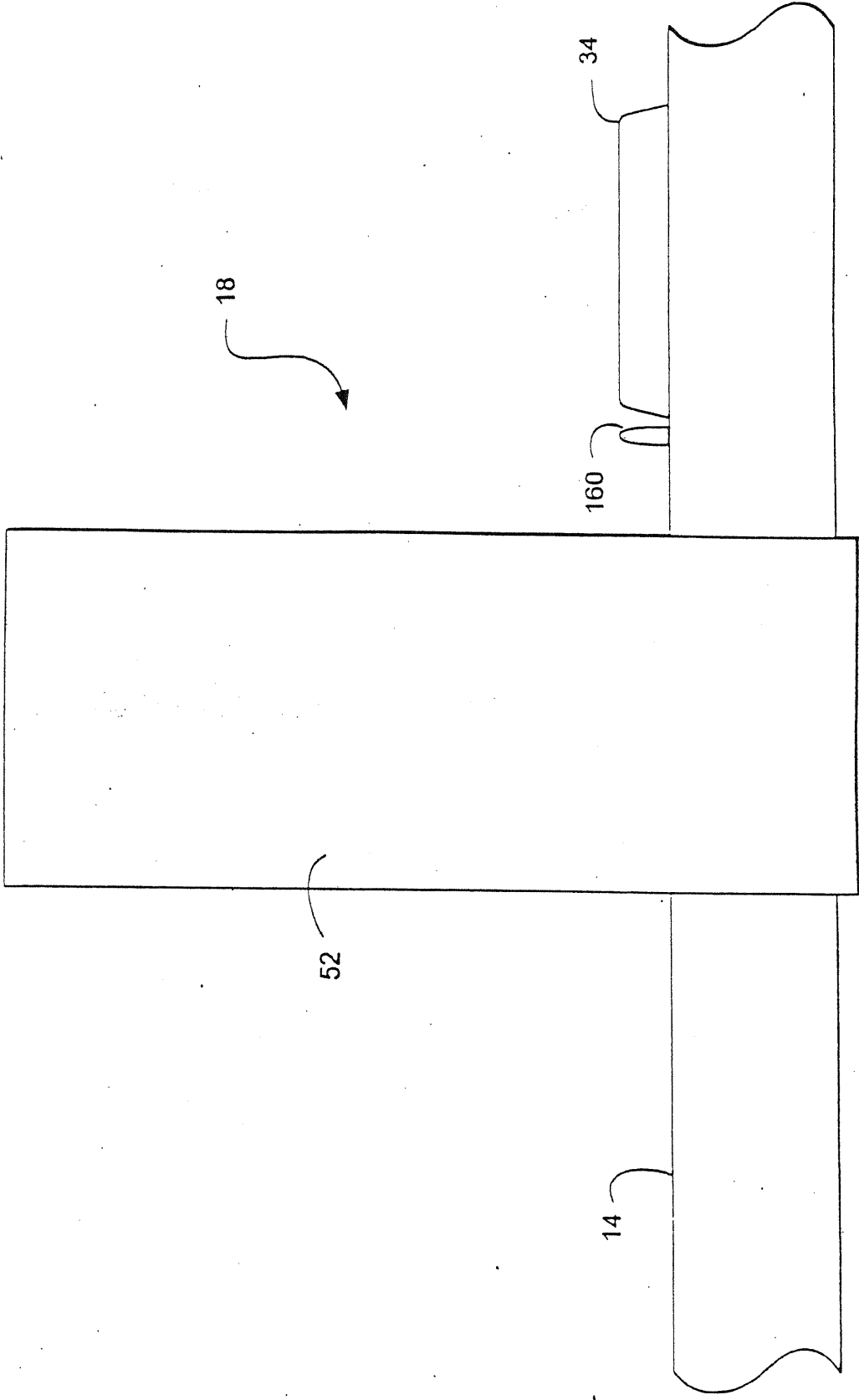


FIG. 4A

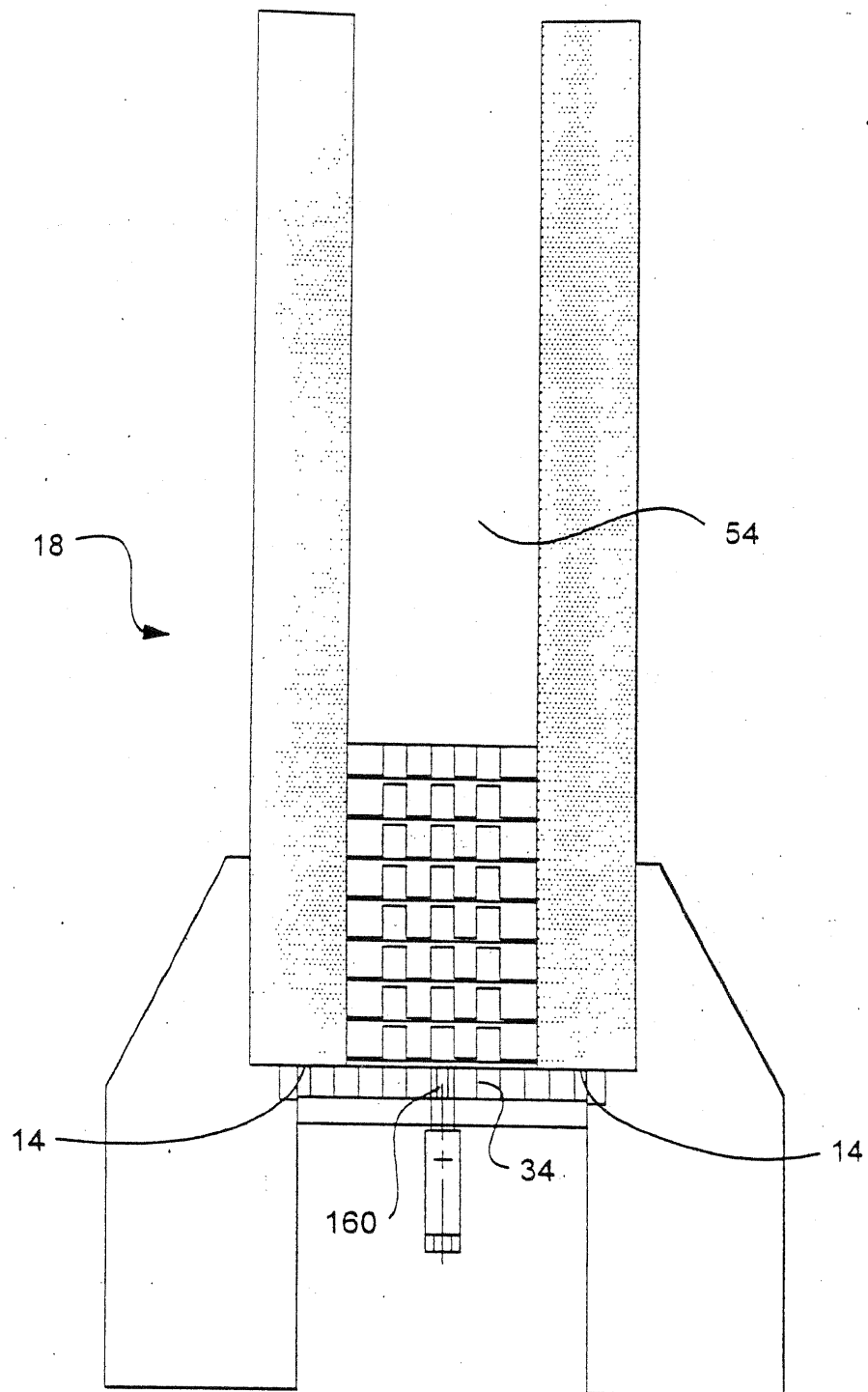


FIG. 4B

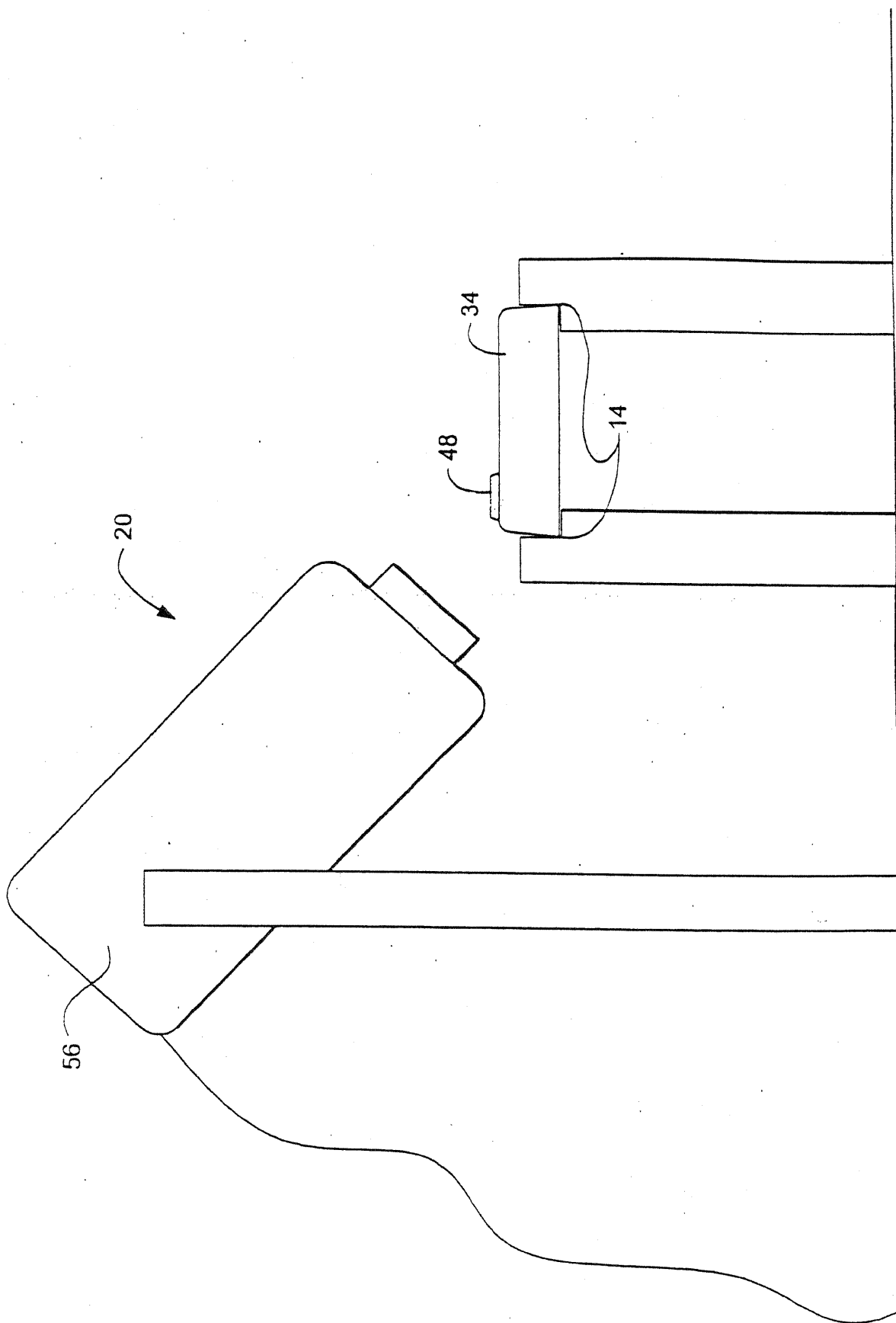


FIG. 4C

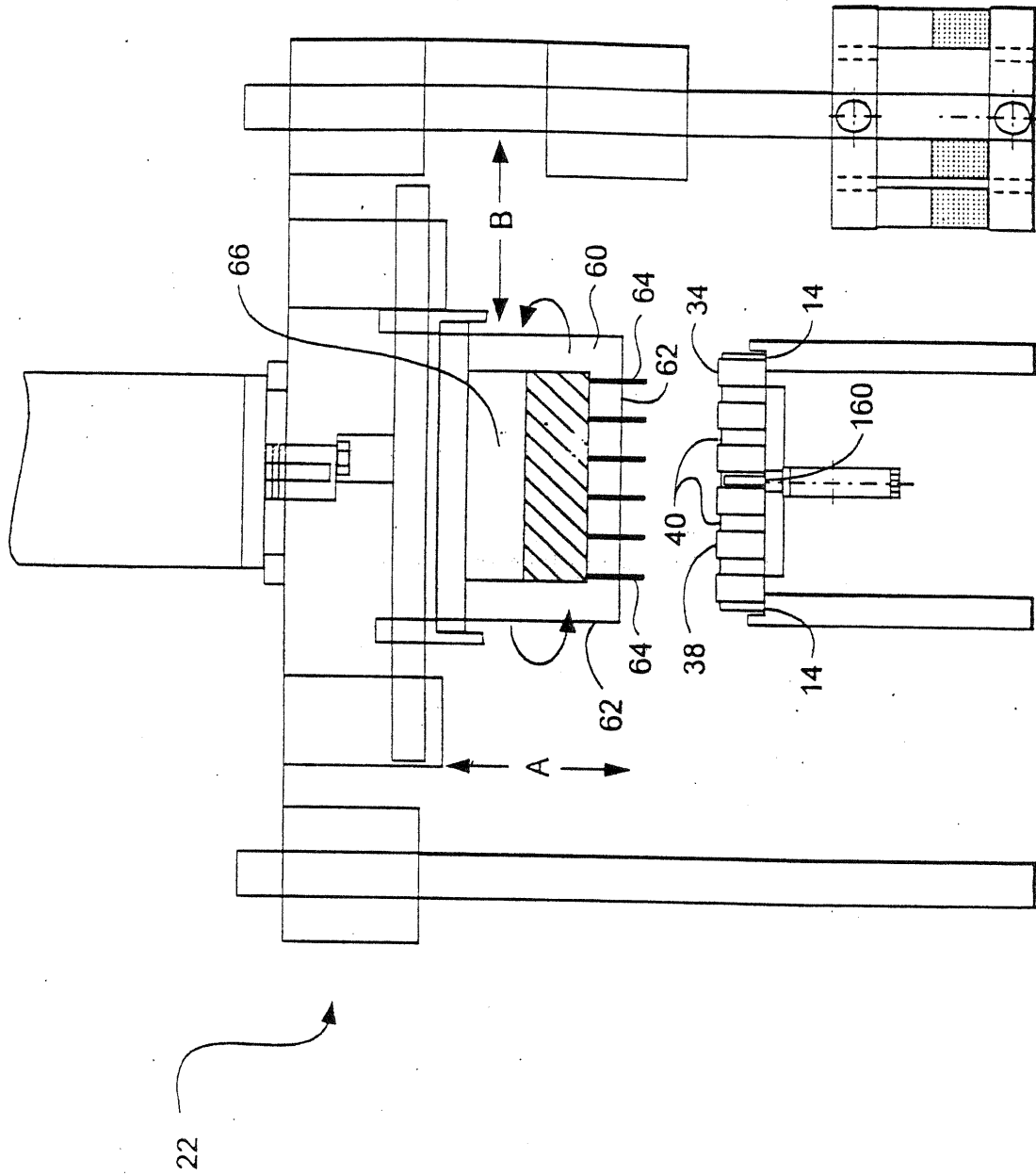


FIG. 4D

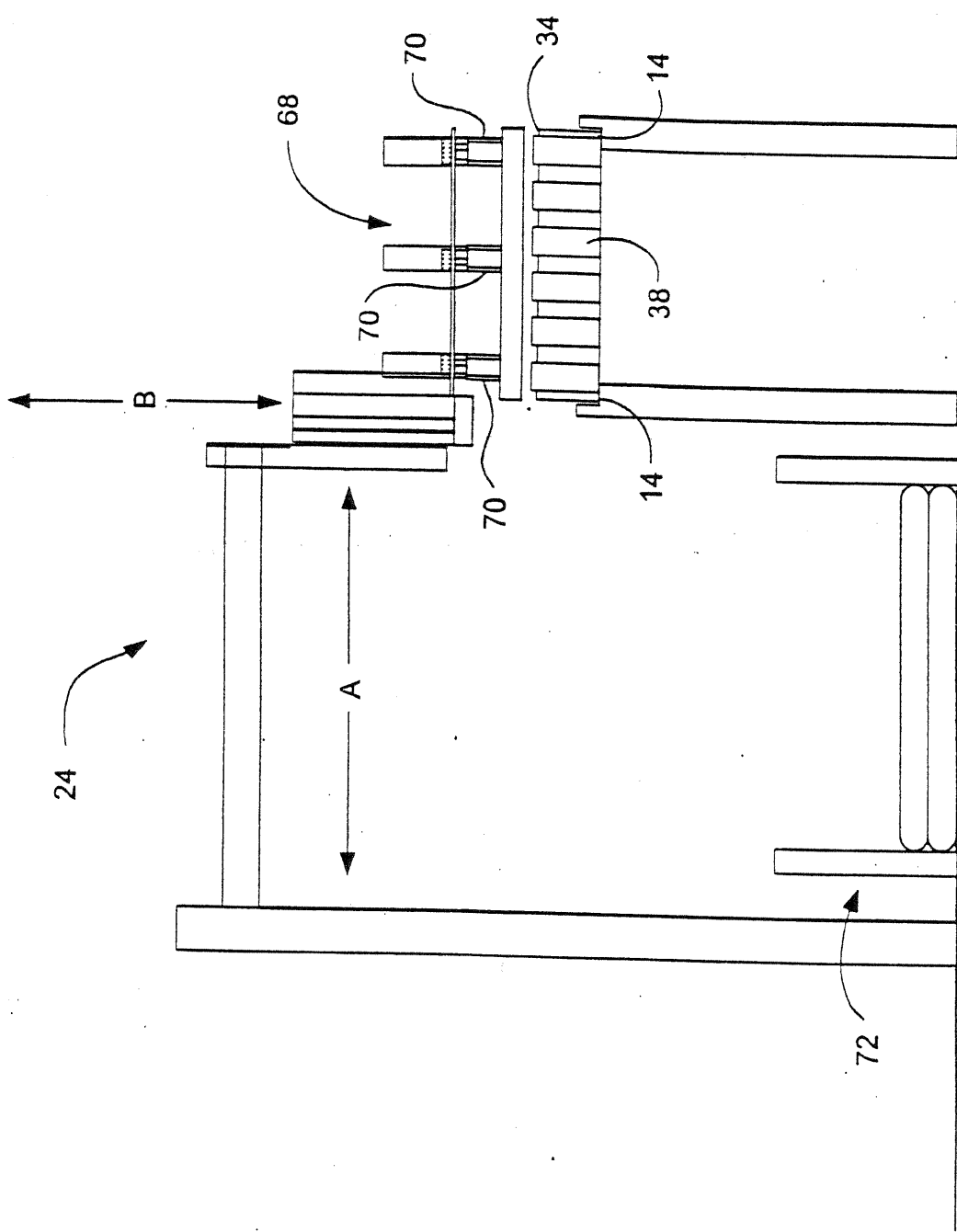


FIG. 4E

The diagram illustrates a multi-lane assay plate, possibly a microplate, with four distinct lanes. Each lane contains a series of rectangular blocks representing assay components. The components are labeled with reference numerals: 14, 74, 76, 78, and 80. A horizontal double-headed arrow labeled 'A' indicates a distance or dimension across the plate. The diagram is oriented vertically, with the top of the plate at the bottom of the image.

FIG. 4F

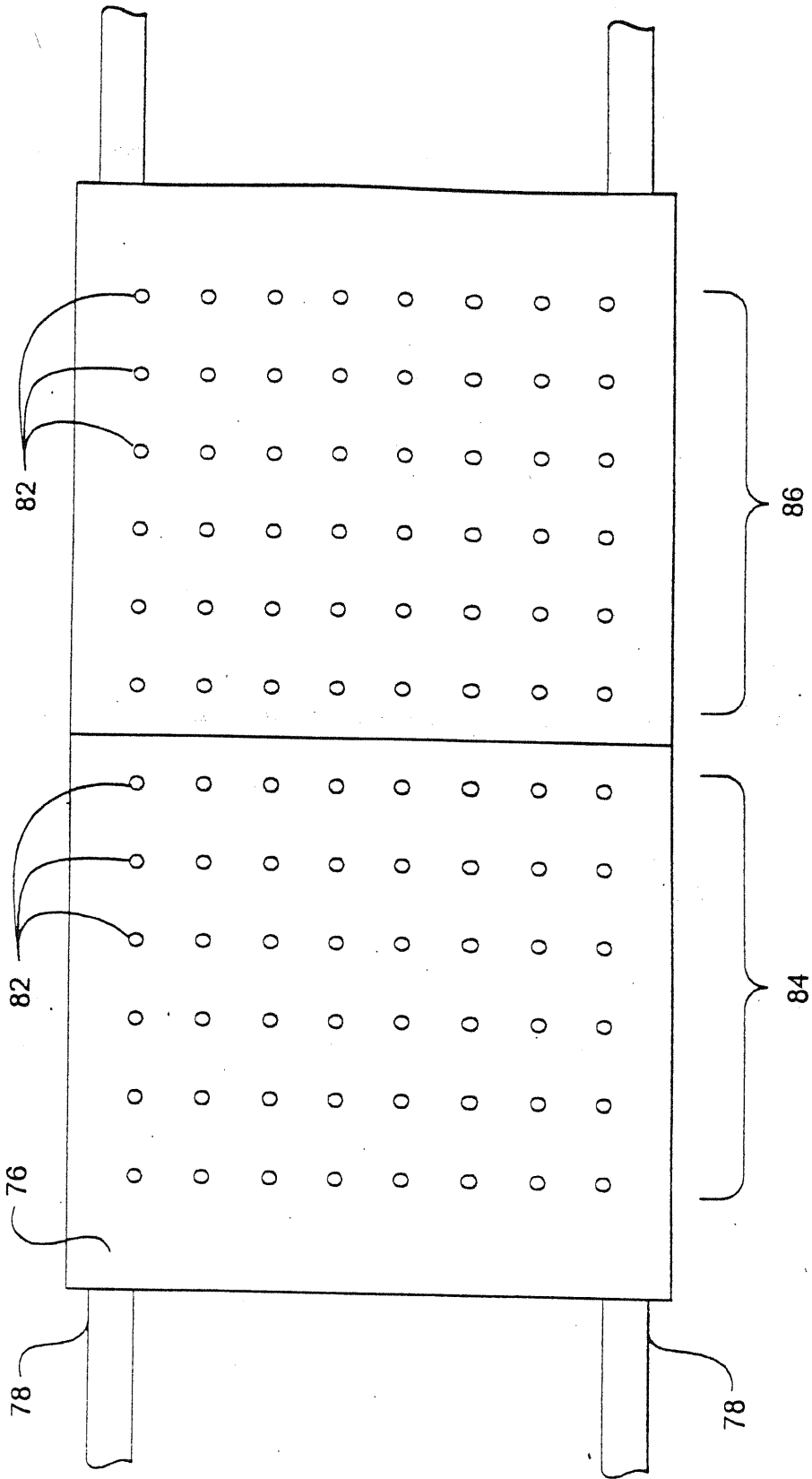


FIG. 4G

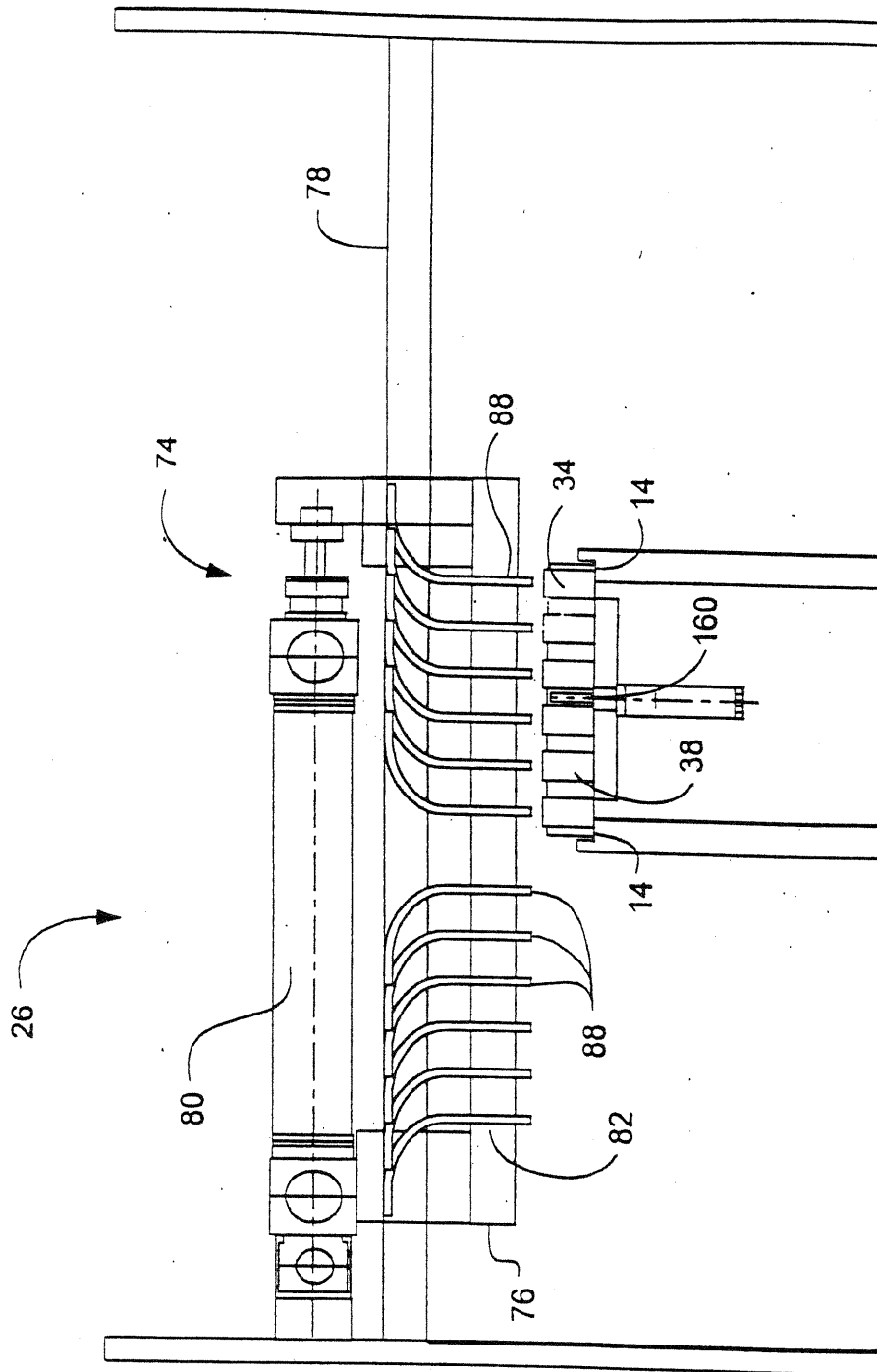


FIG. 4H

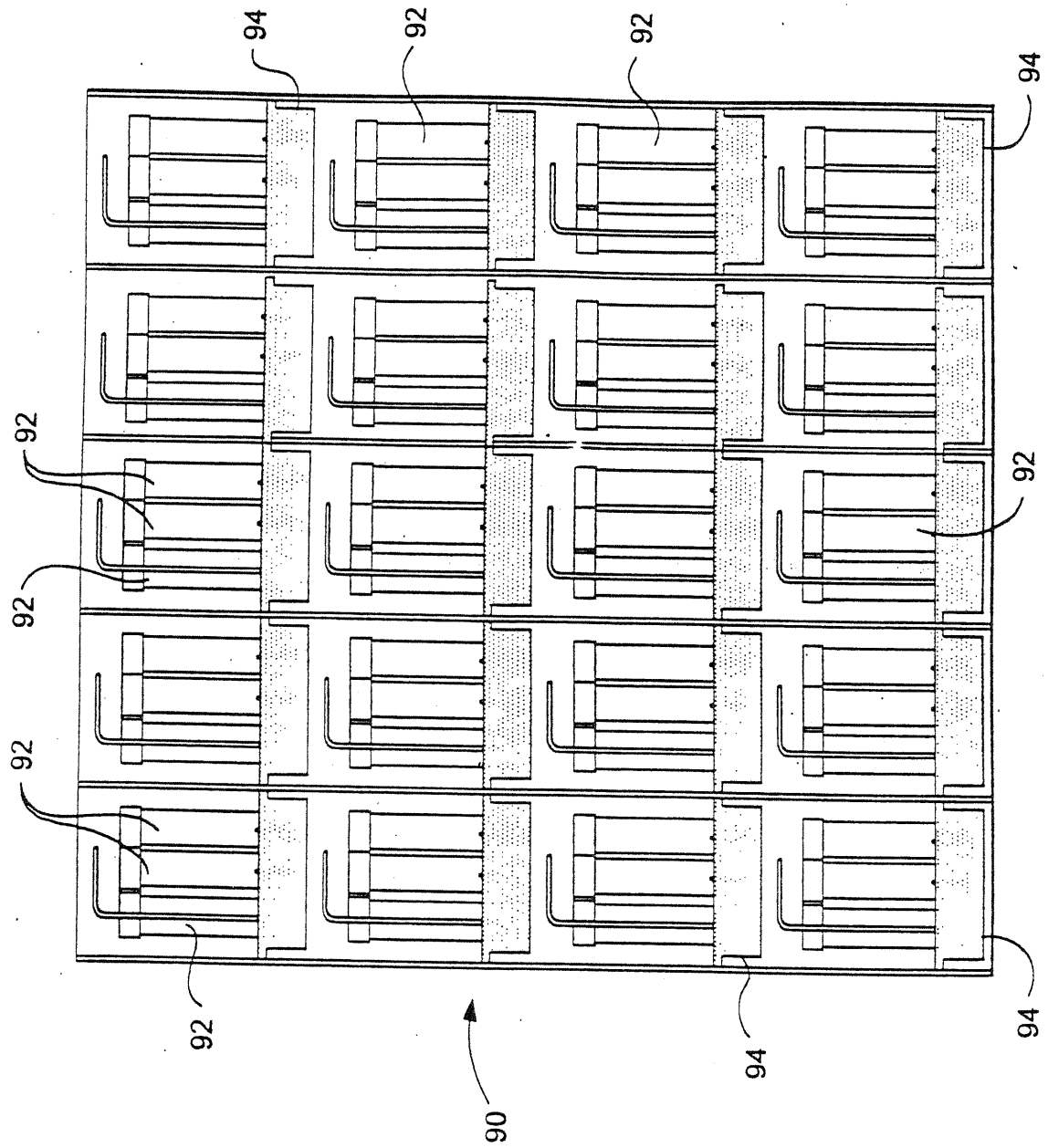


FIG. 41

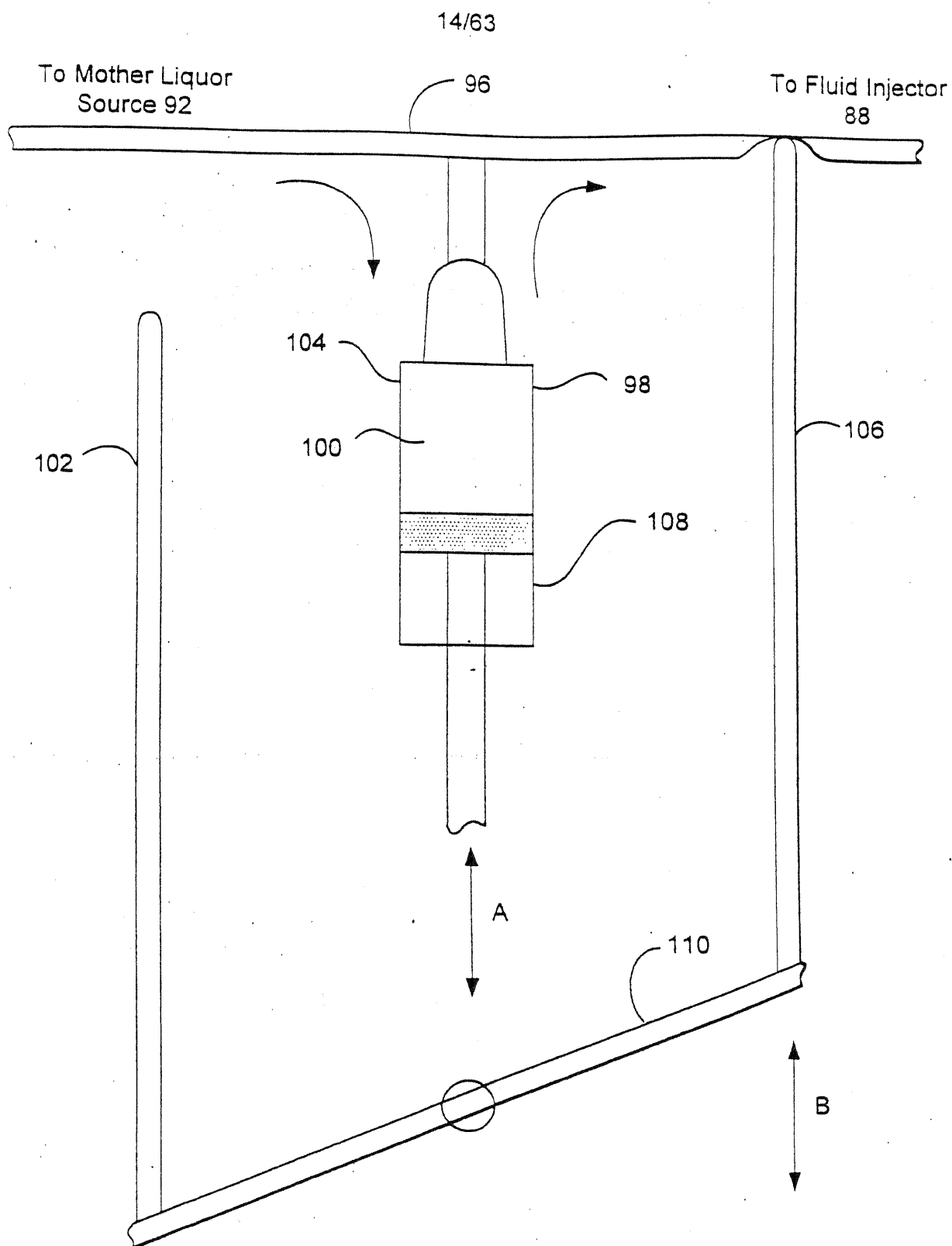


FIG. 4J

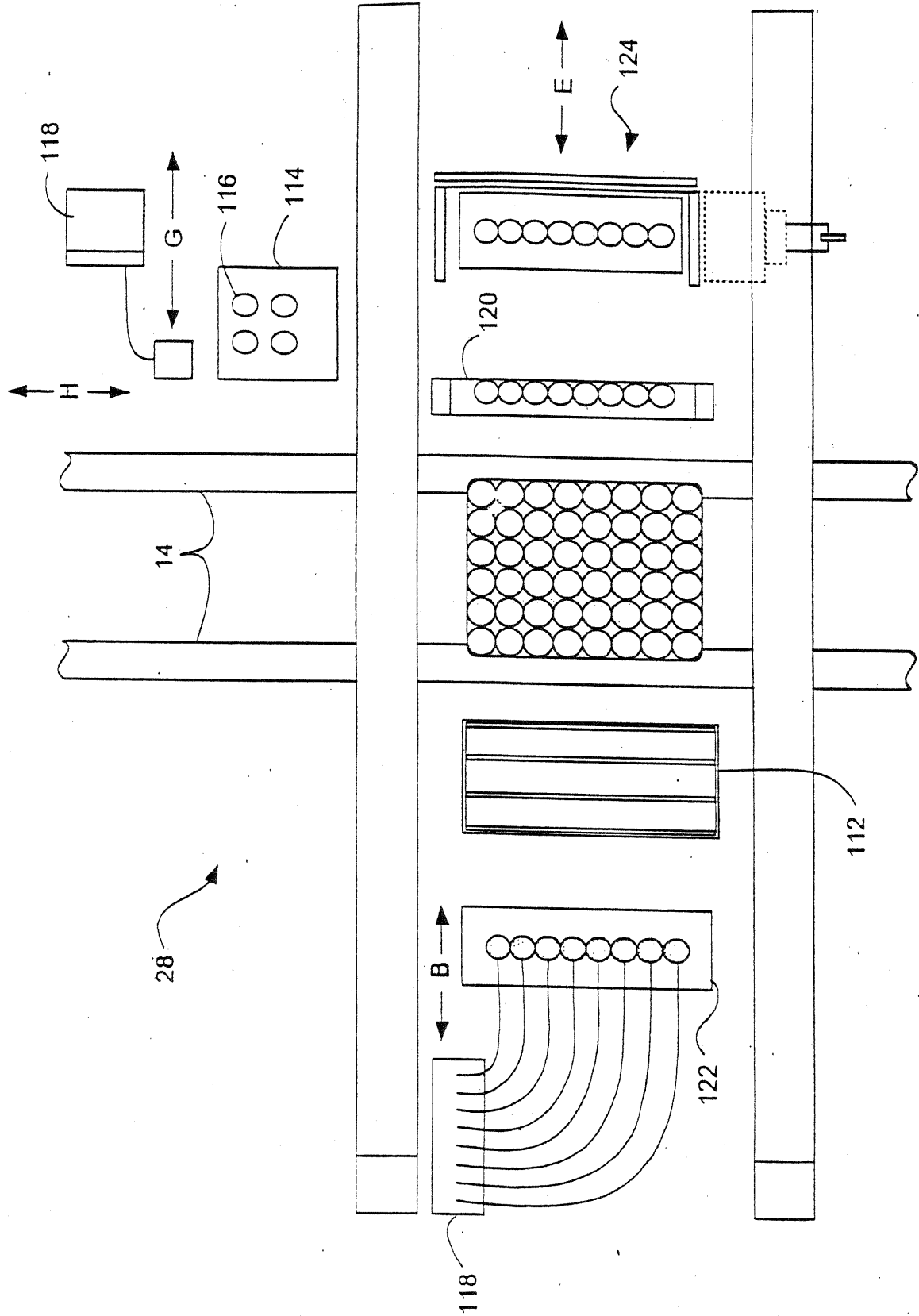


FIG. 5A



FIG. 5B

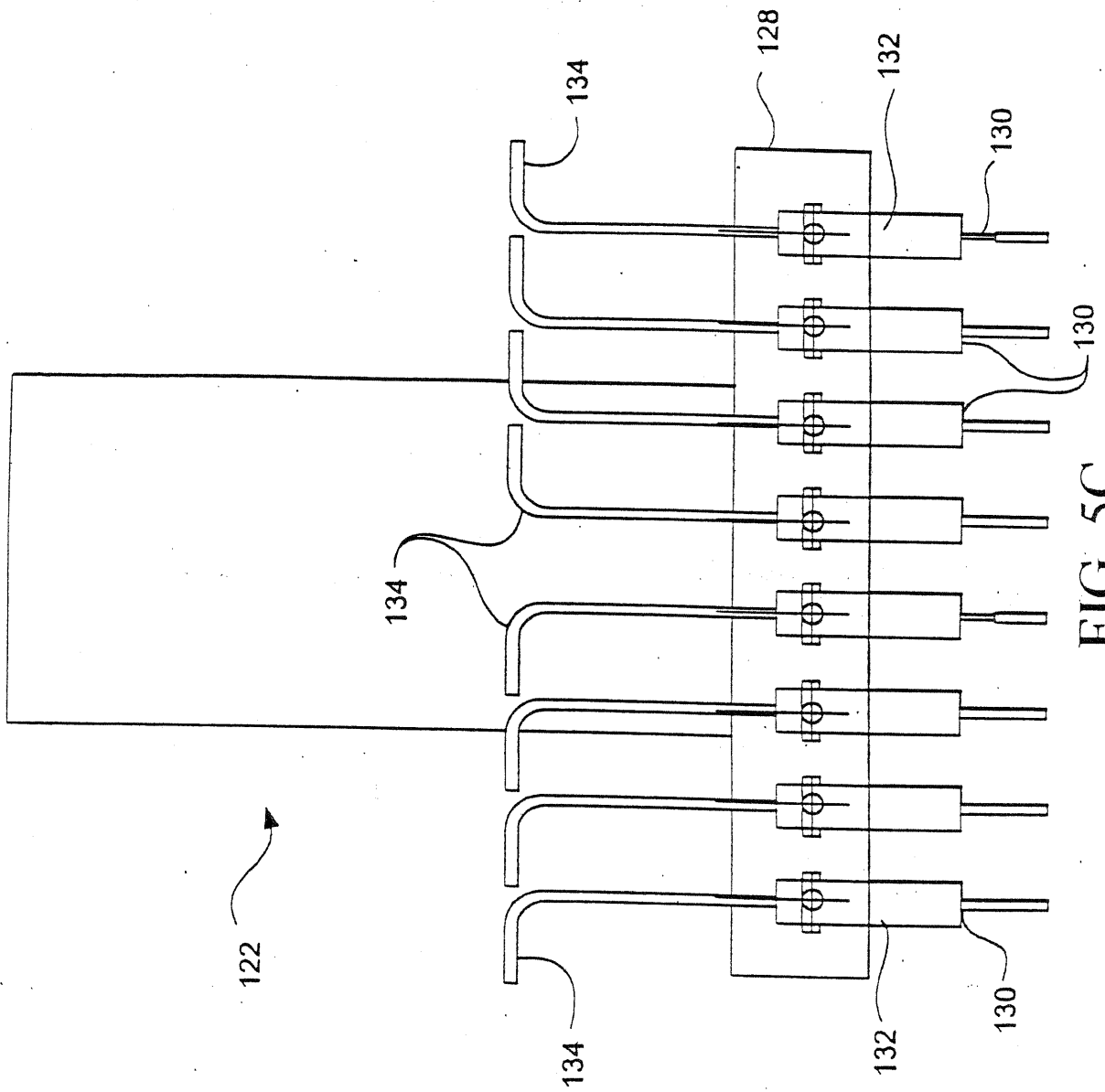


FIG. 5C

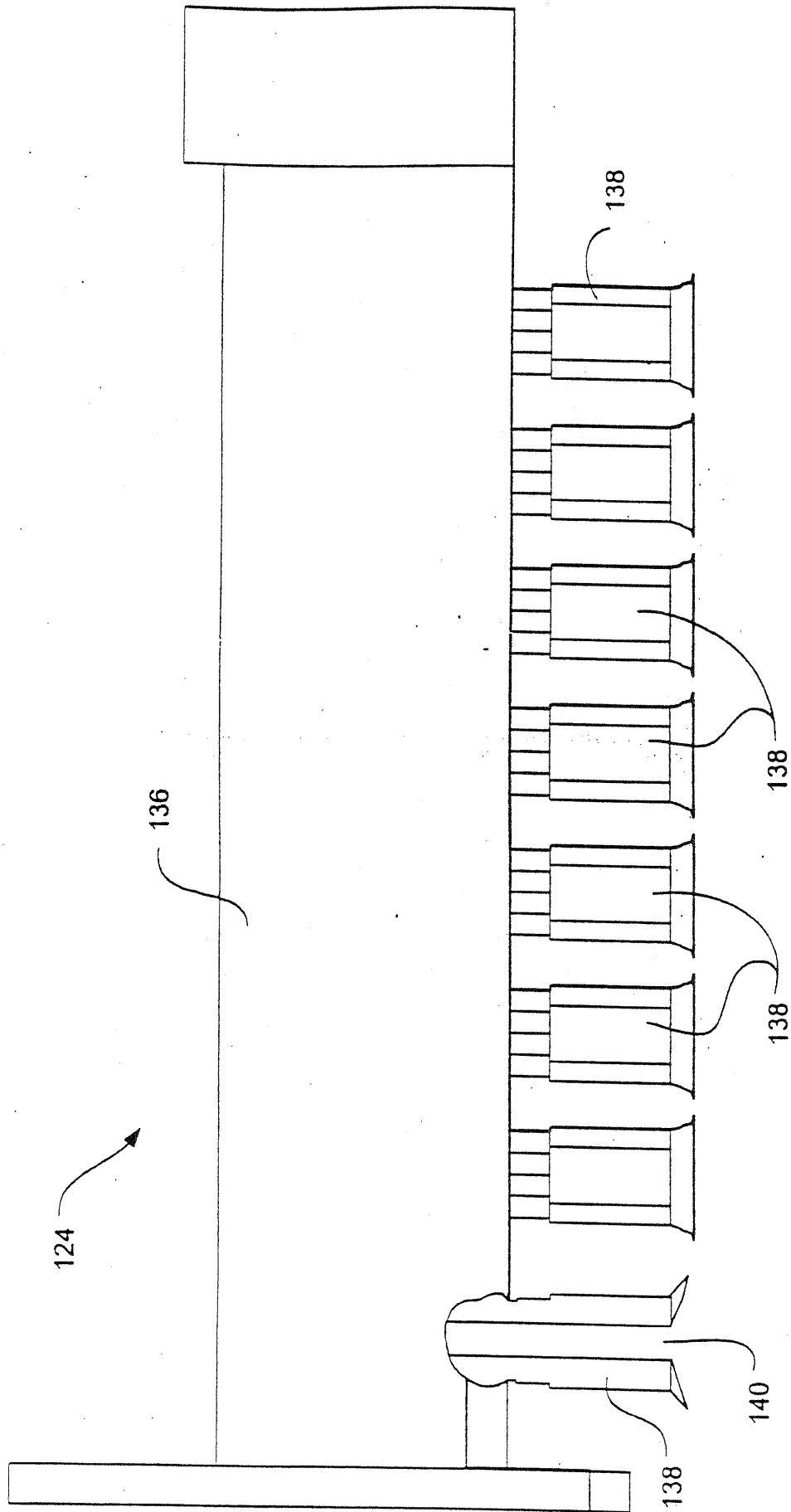


FIG. 5D

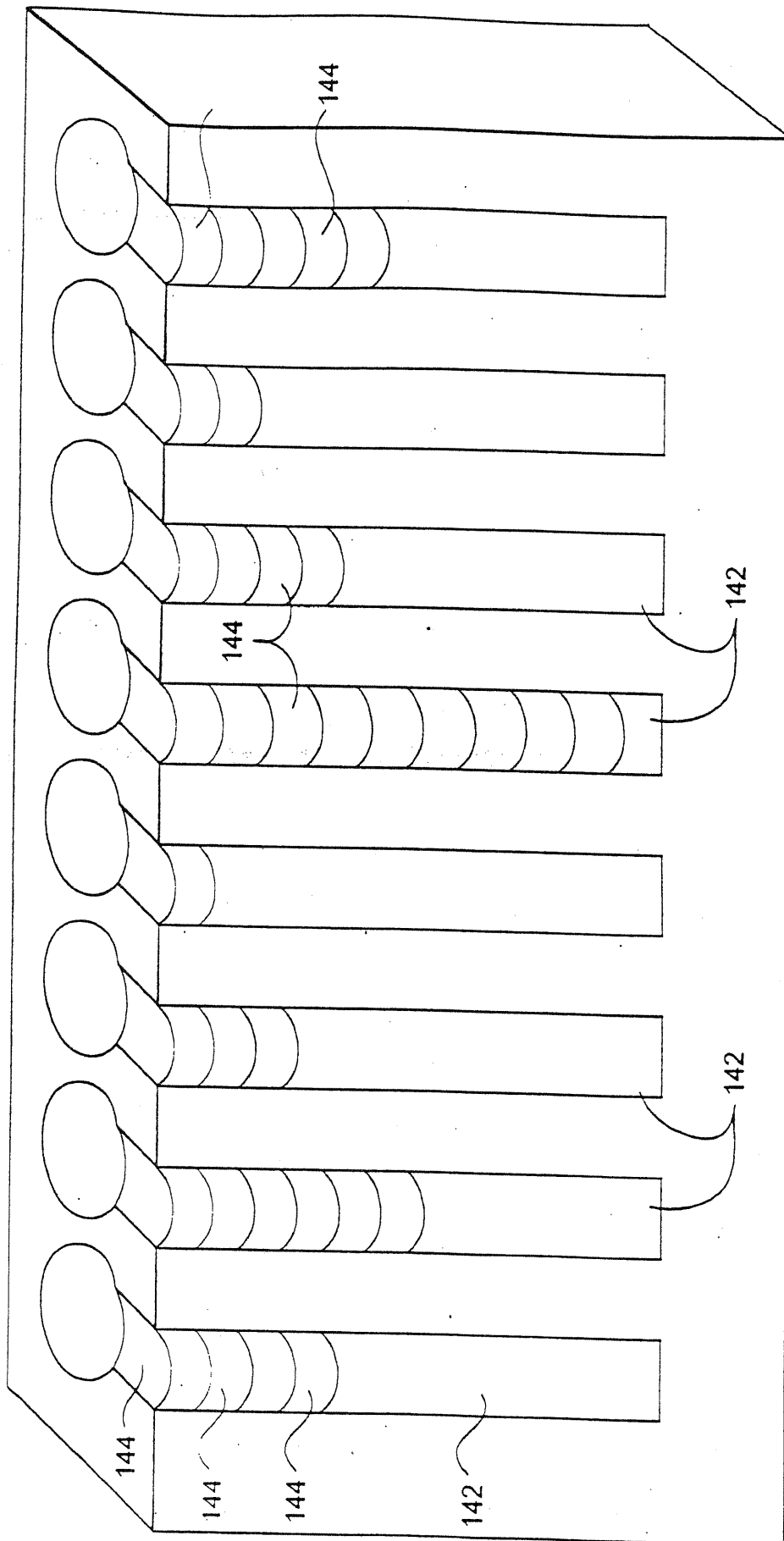


FIG. 5E

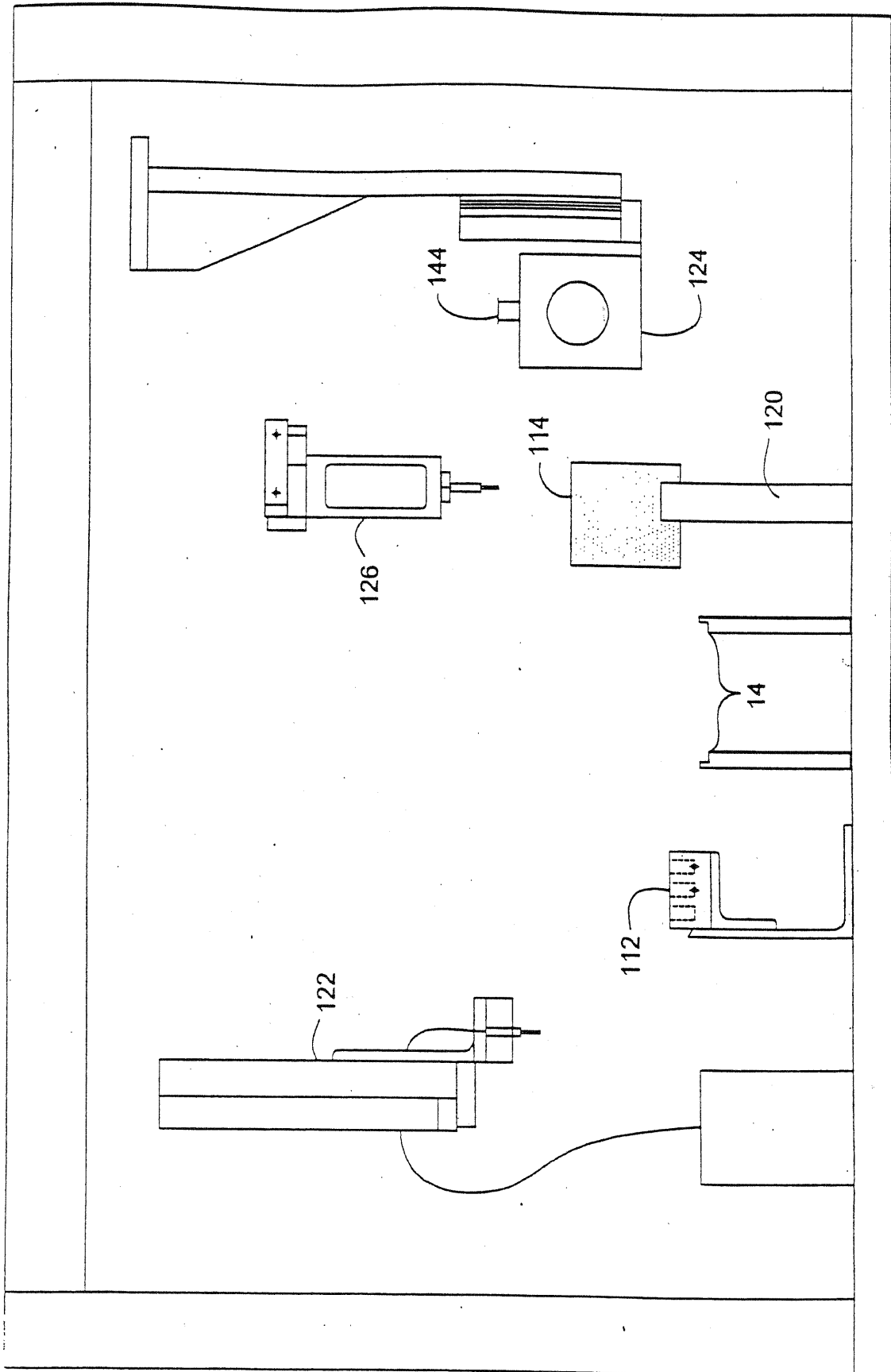


FIG. 6A

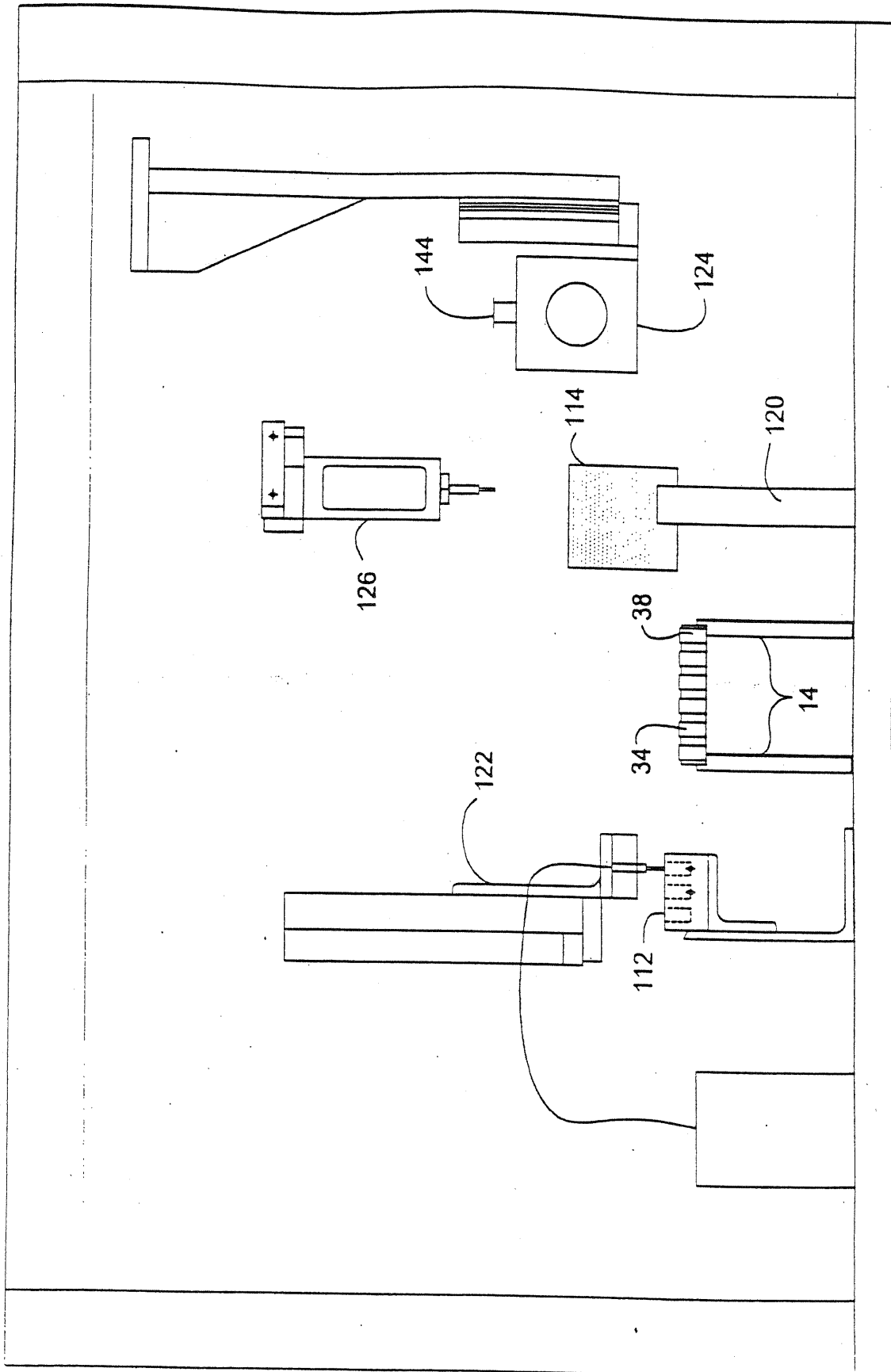


FIG. 6B

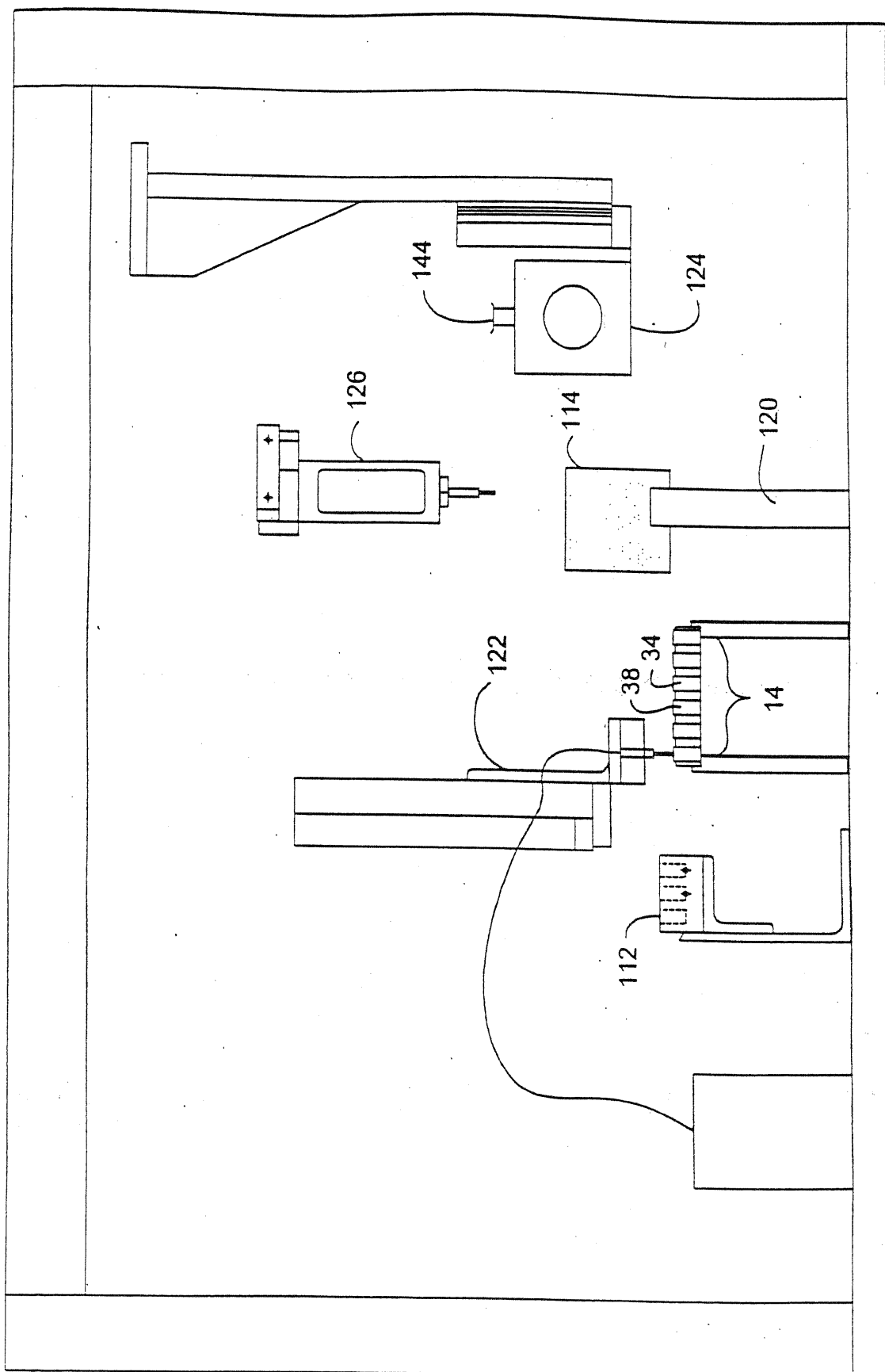


FIG. 6C

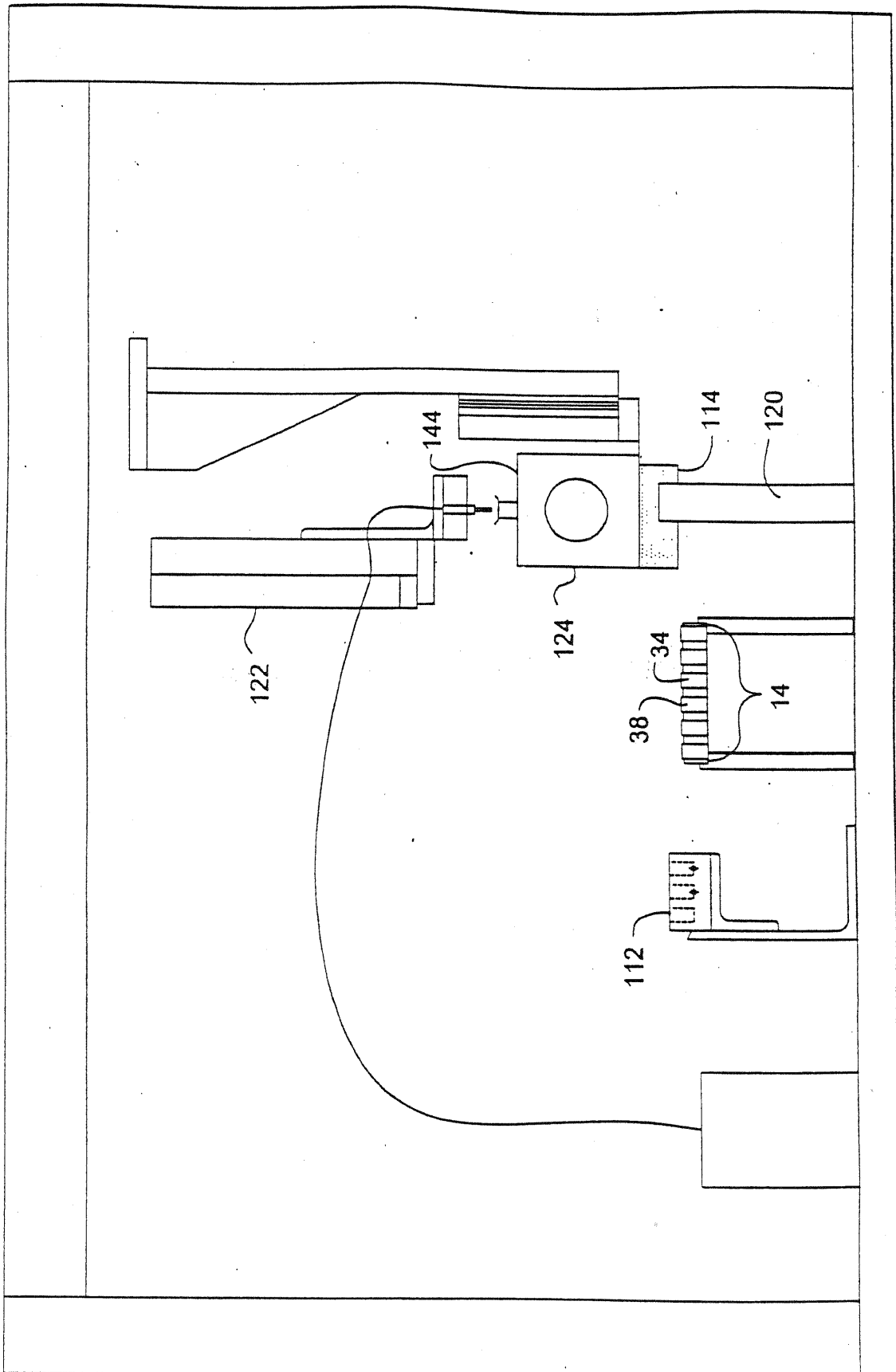


FIG. 6D

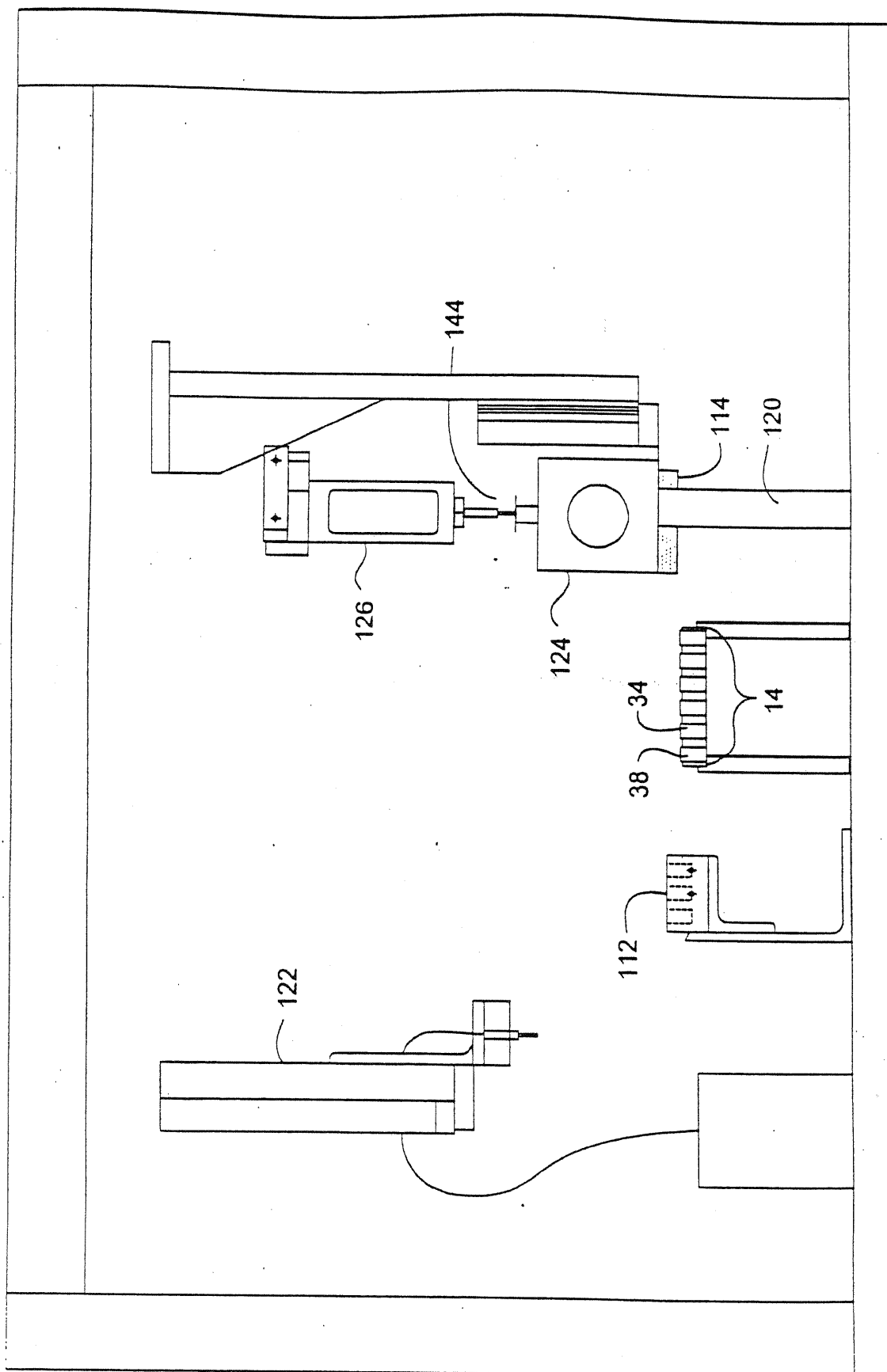


FIG. 6E

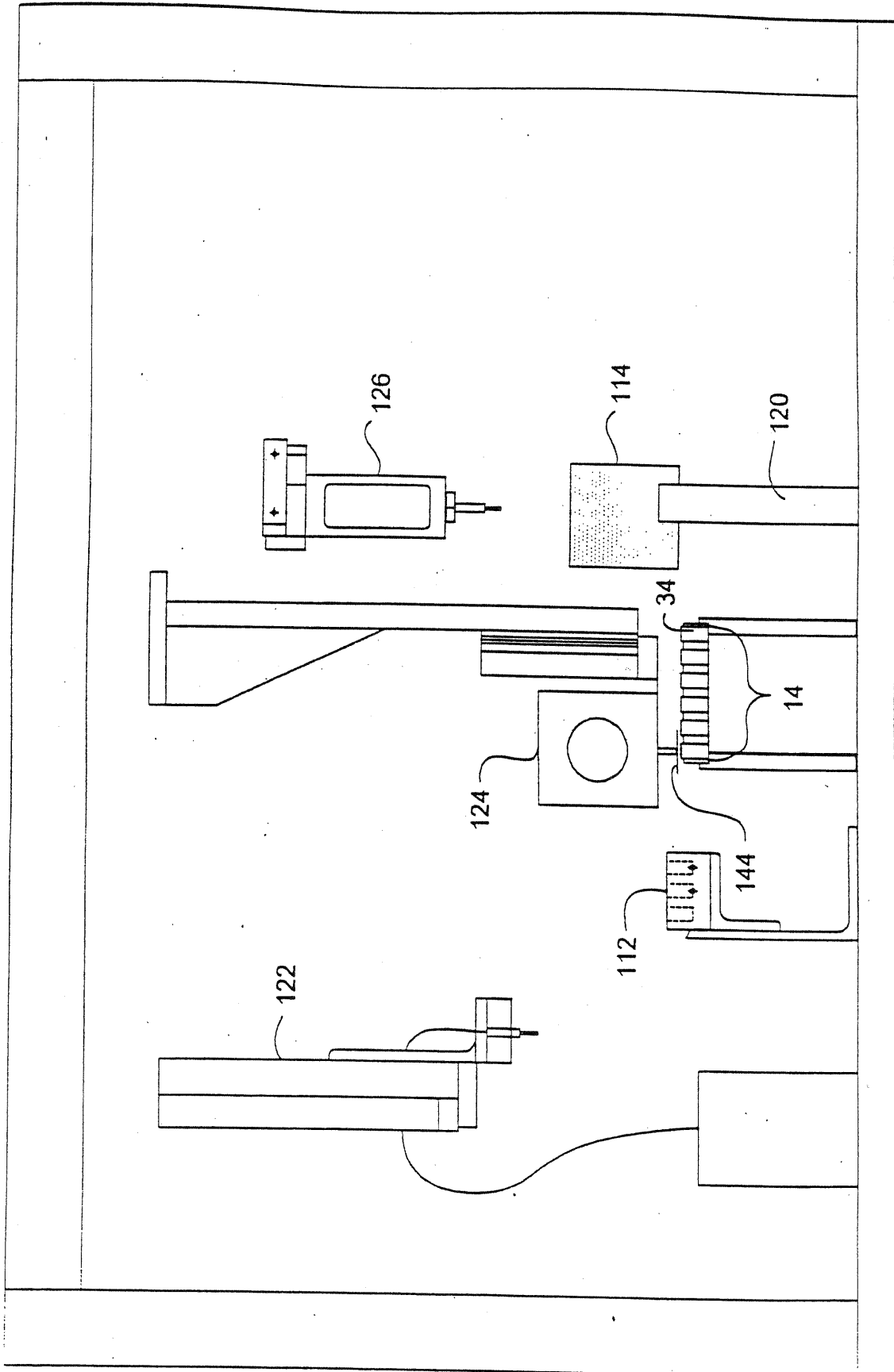


FIG. 6F

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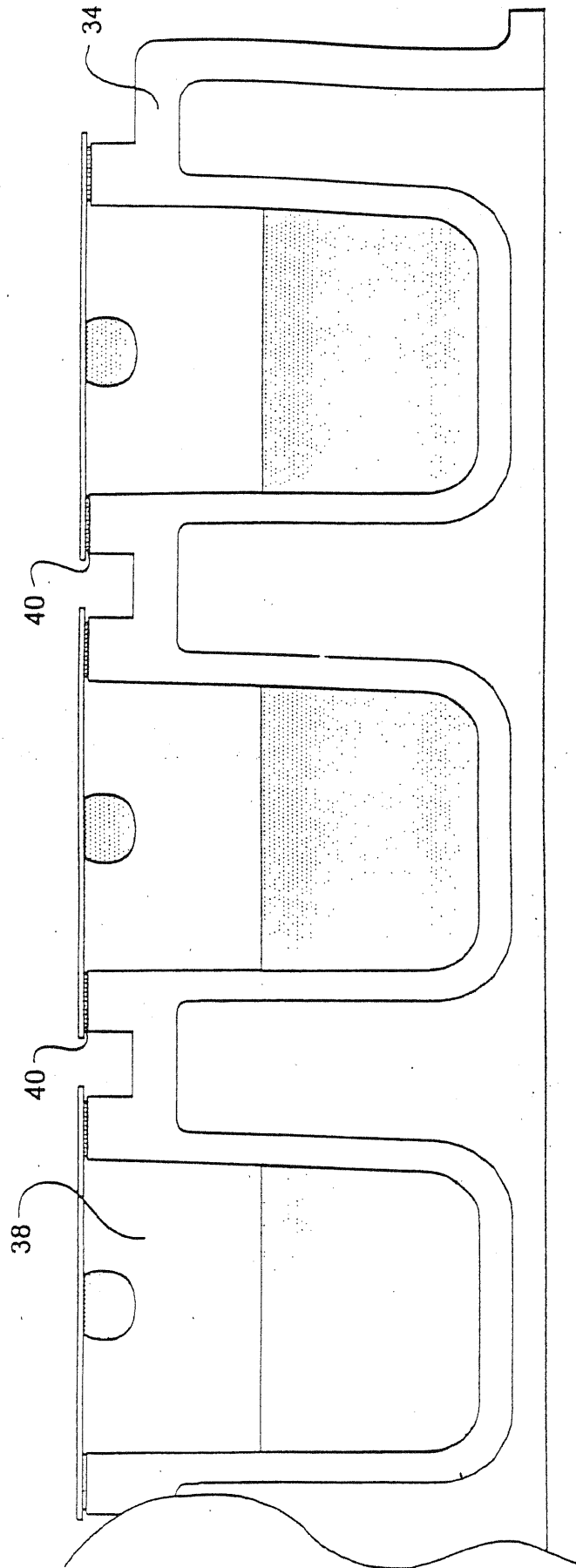


FIG. 6G

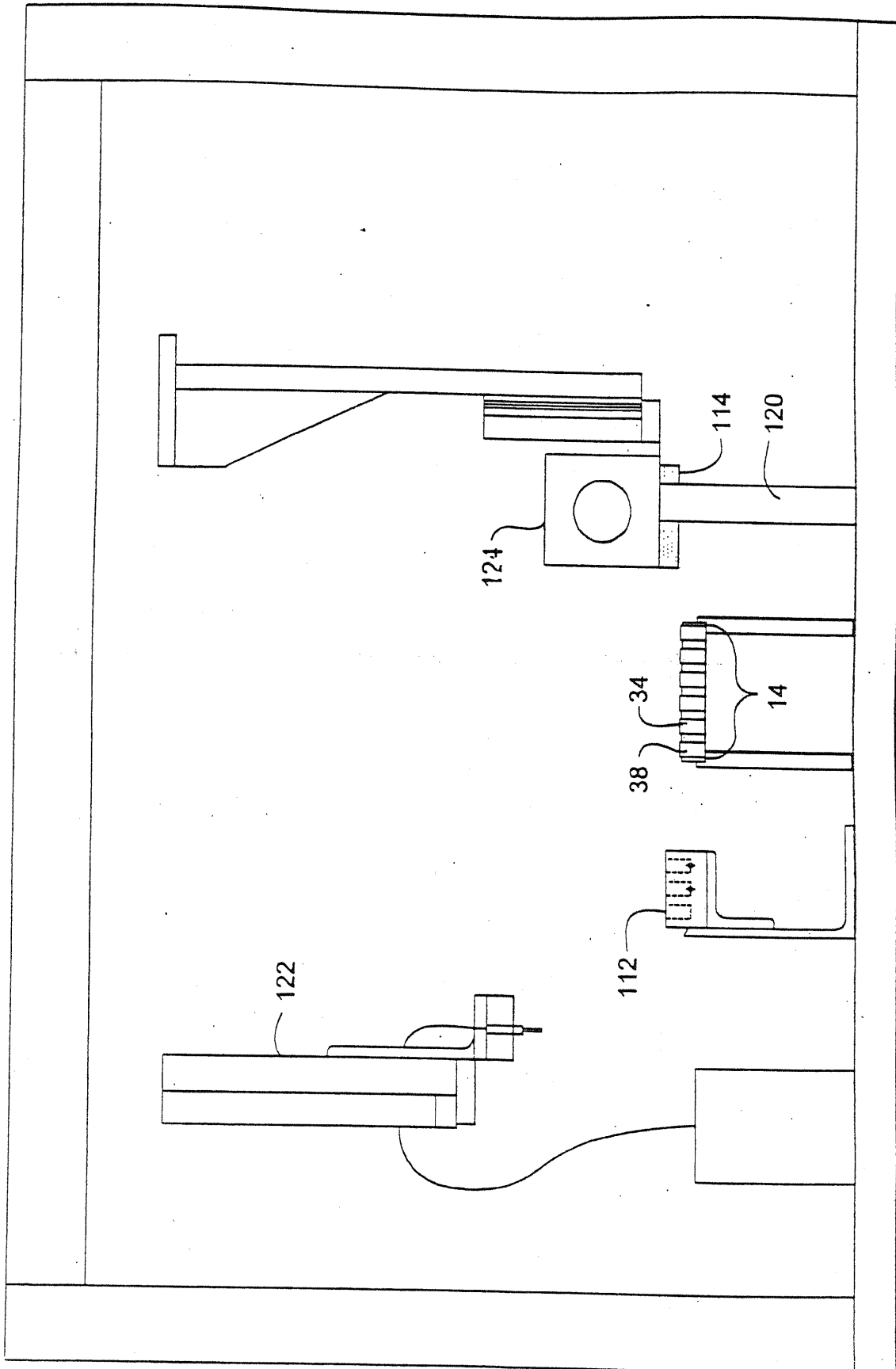


FIG. 6H

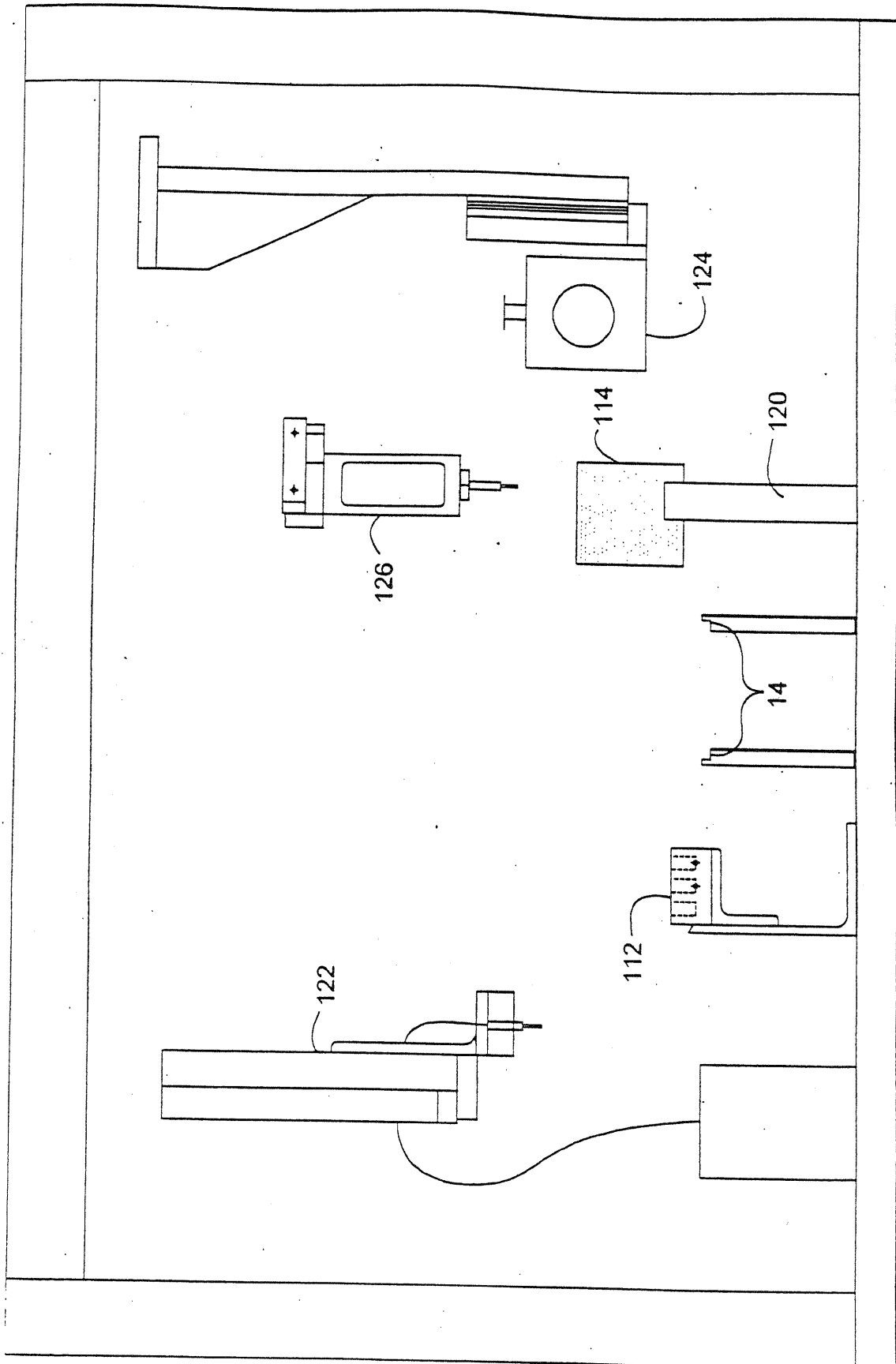


FIG. 6I

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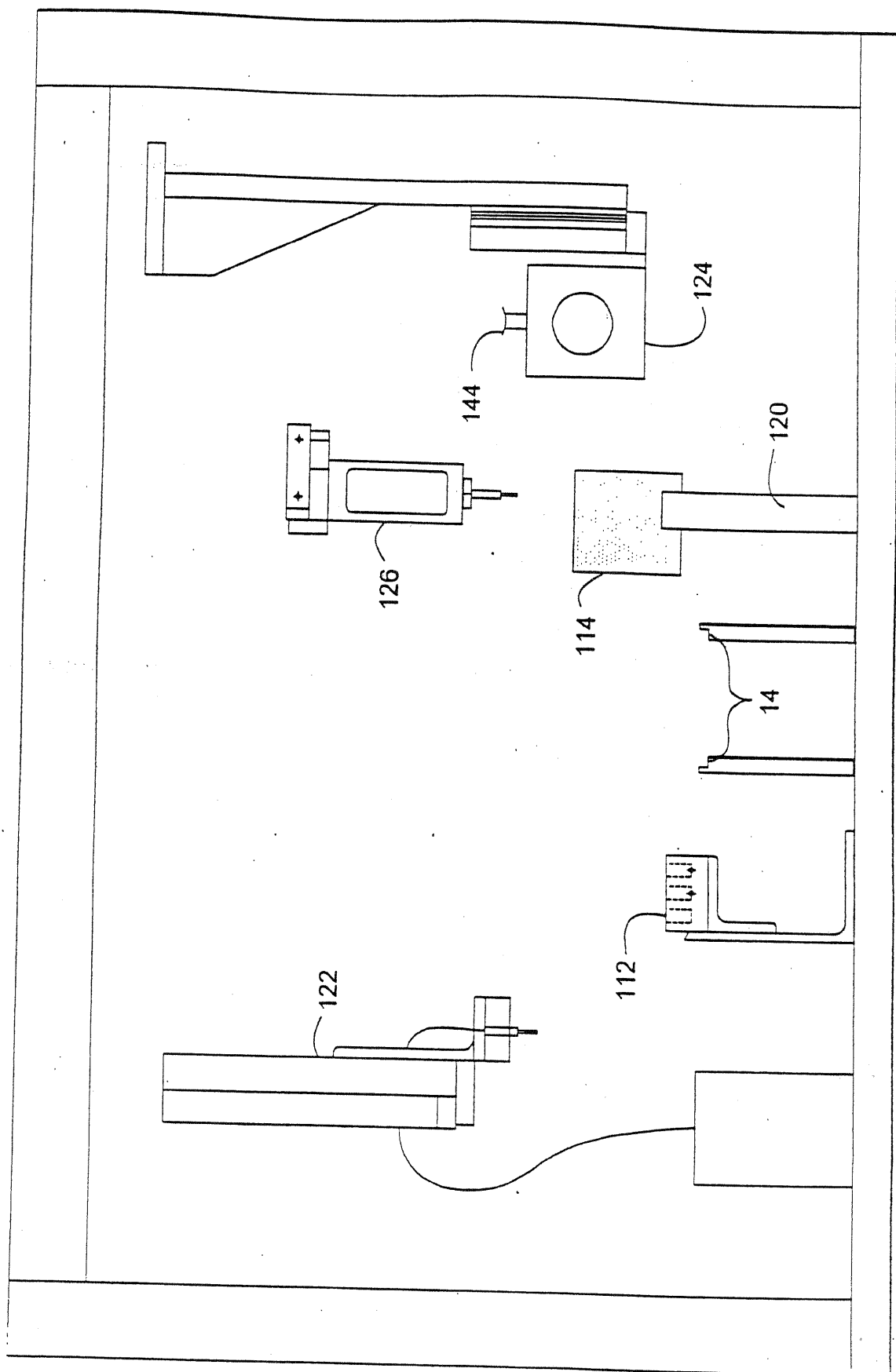


FIG. 7A

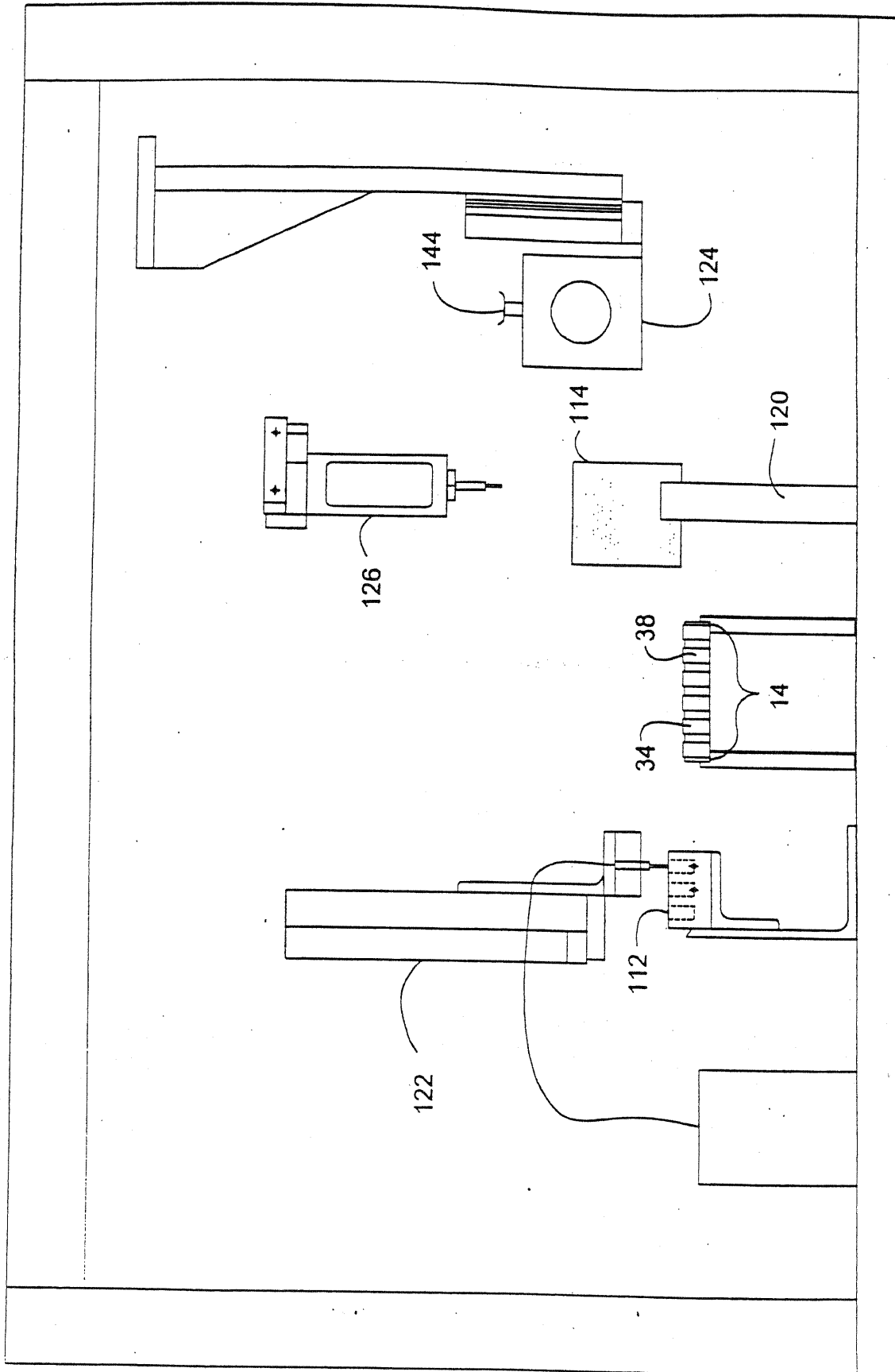


FIG. 7B

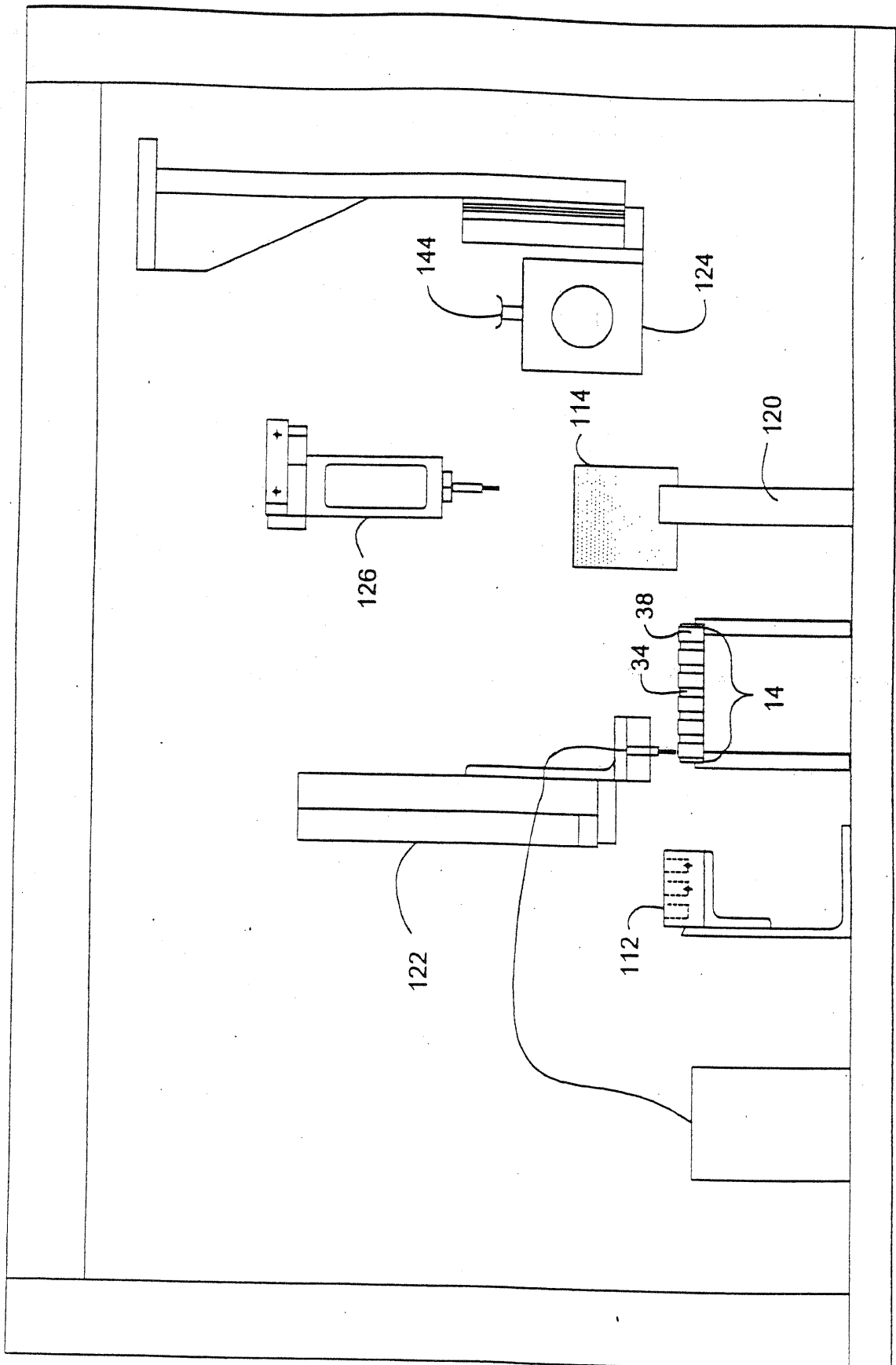


FIG. 7C

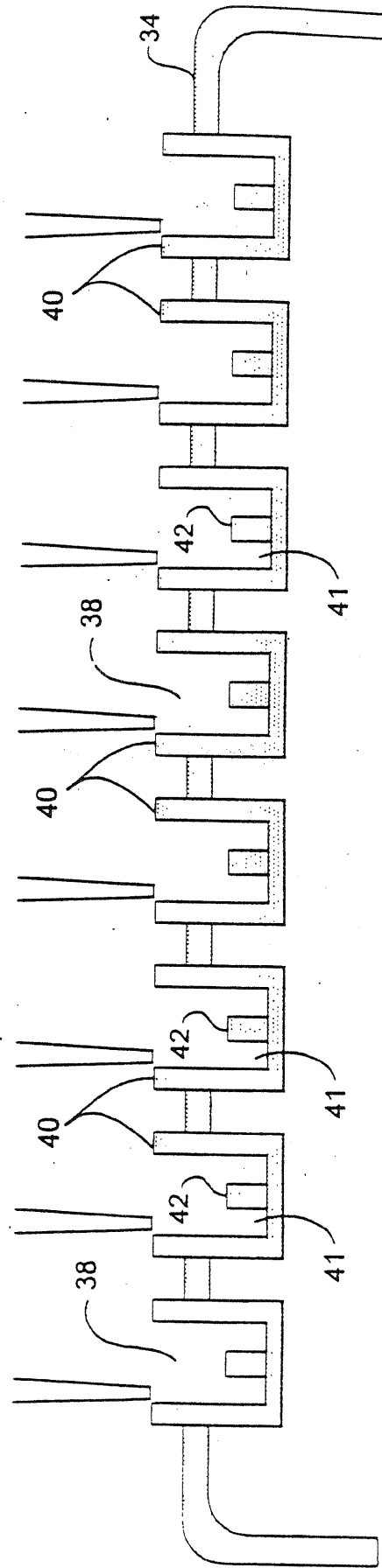


FIG. 7D

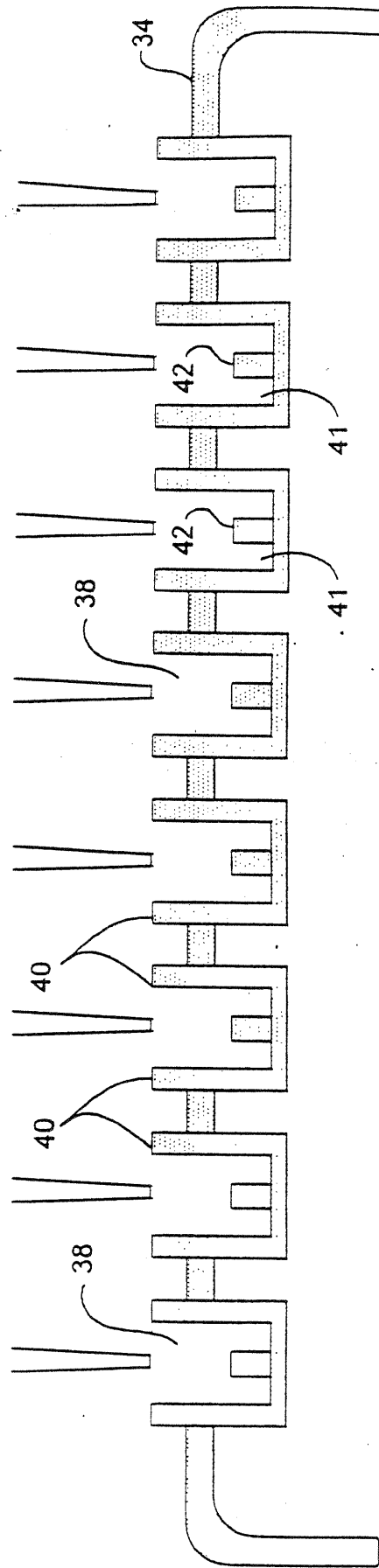


FIG. 7E

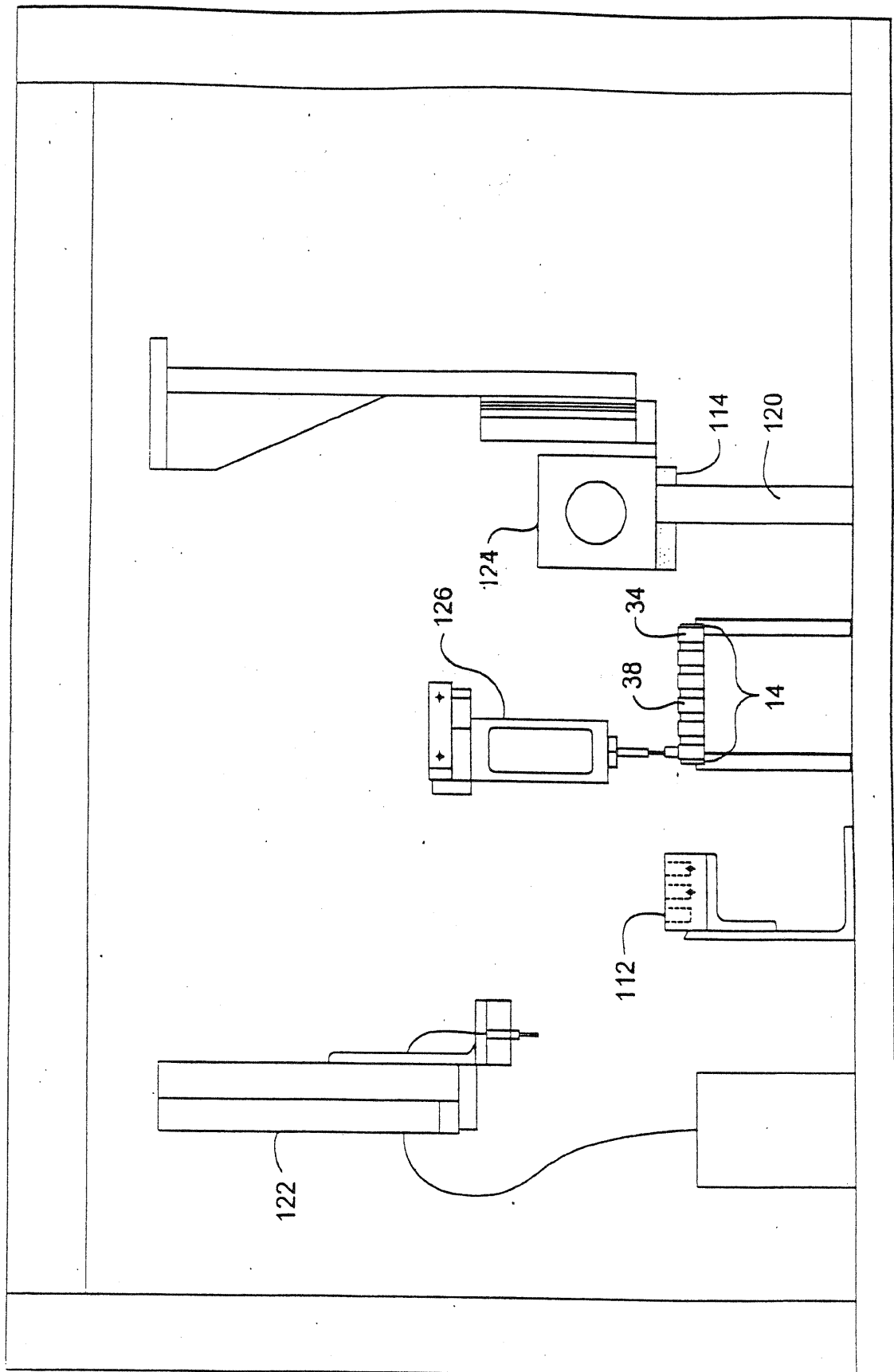


FIG. 7F

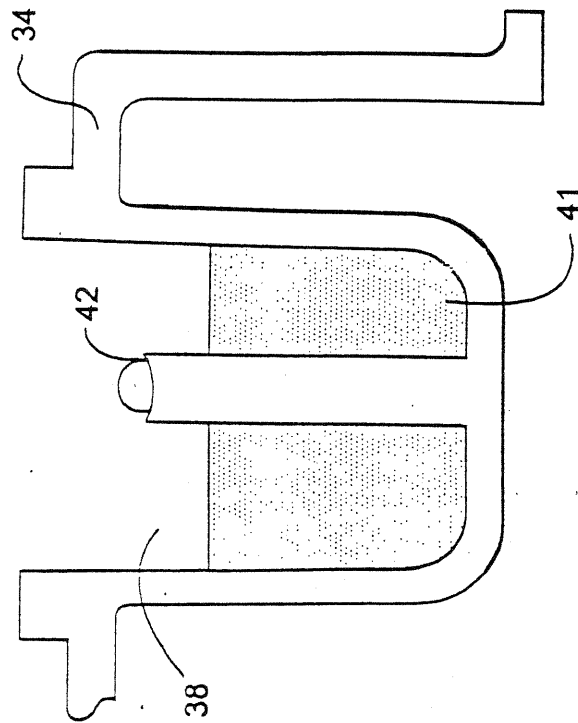


FIG. 7G

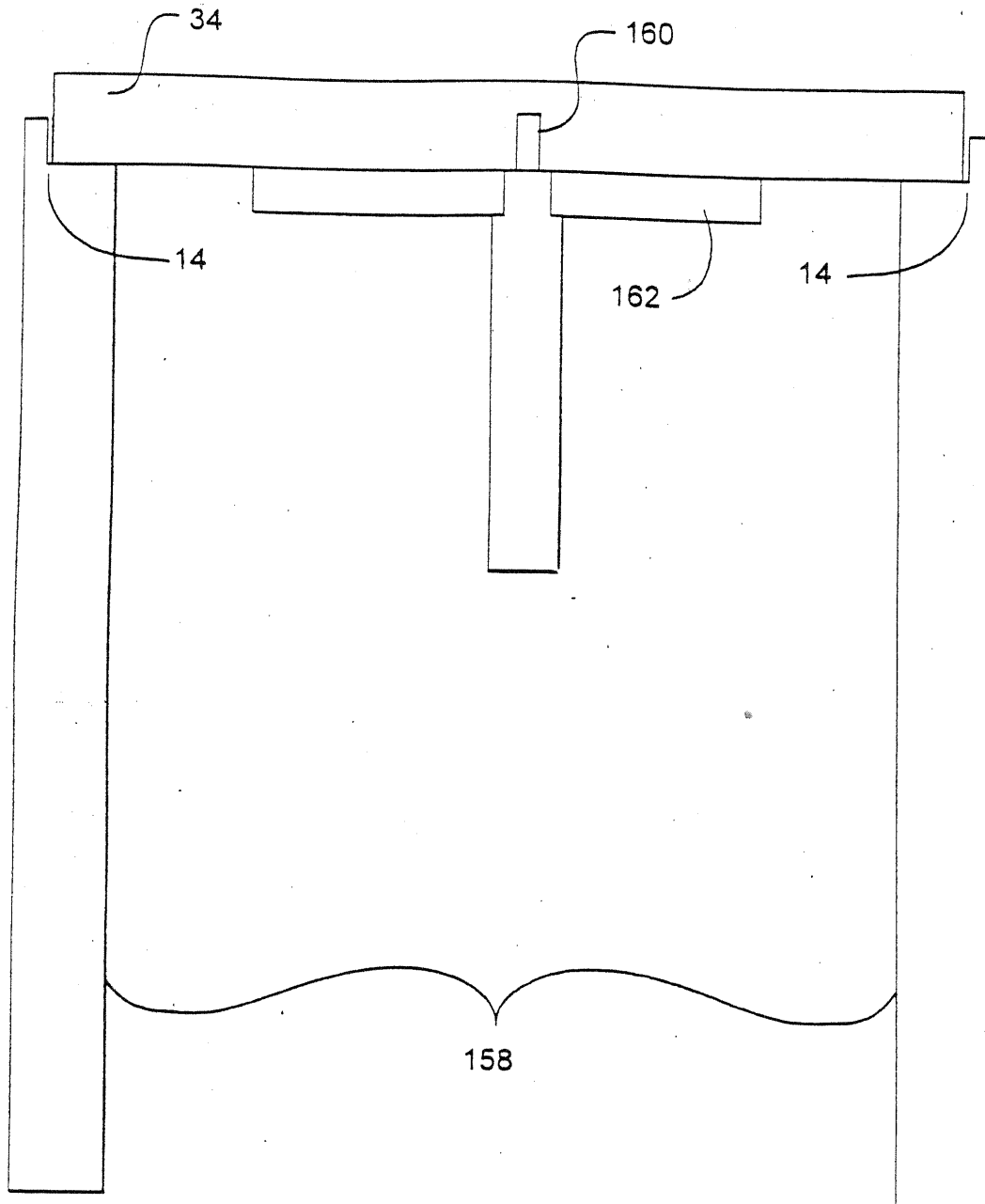


FIG. 8A

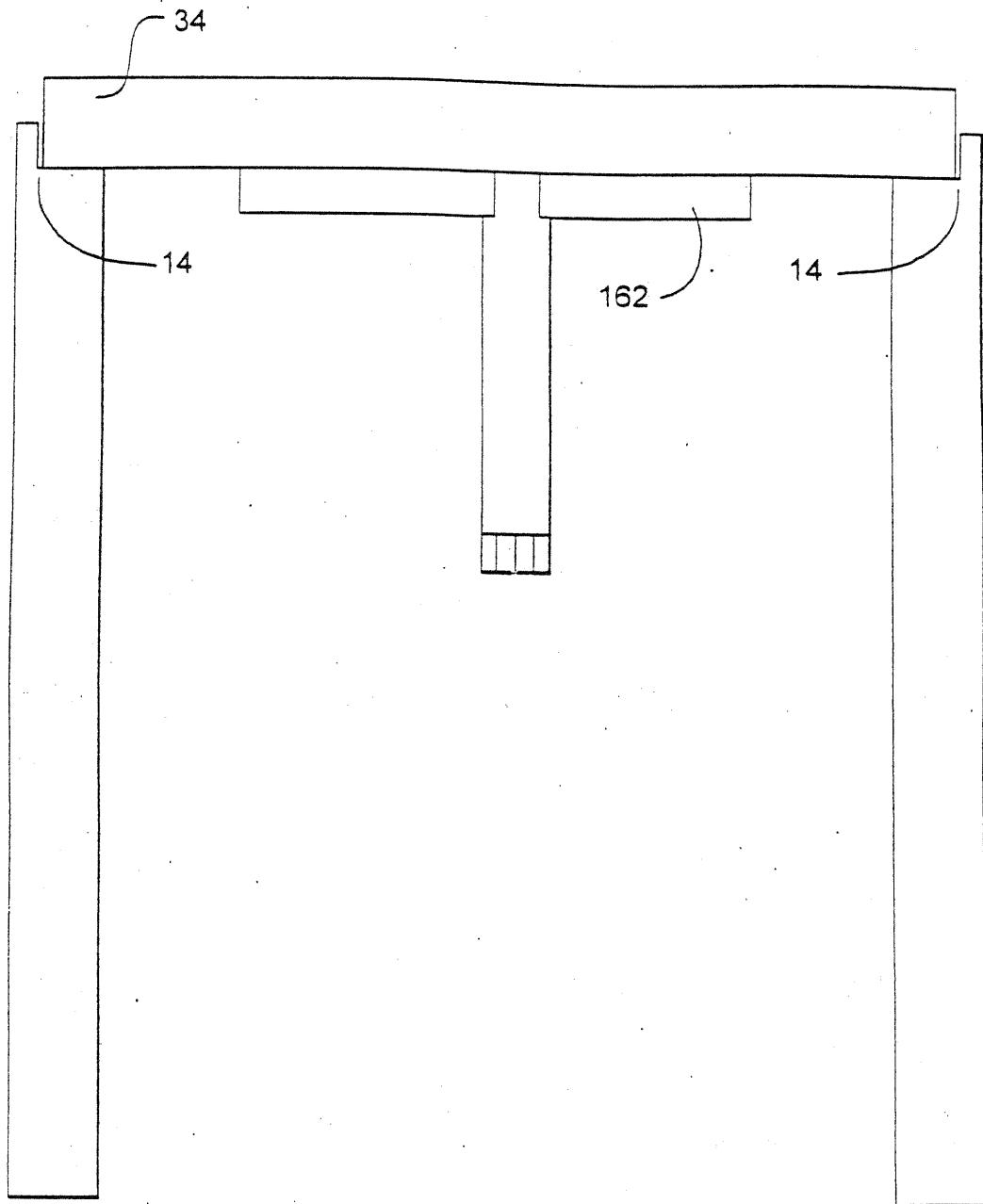


FIG. 8B

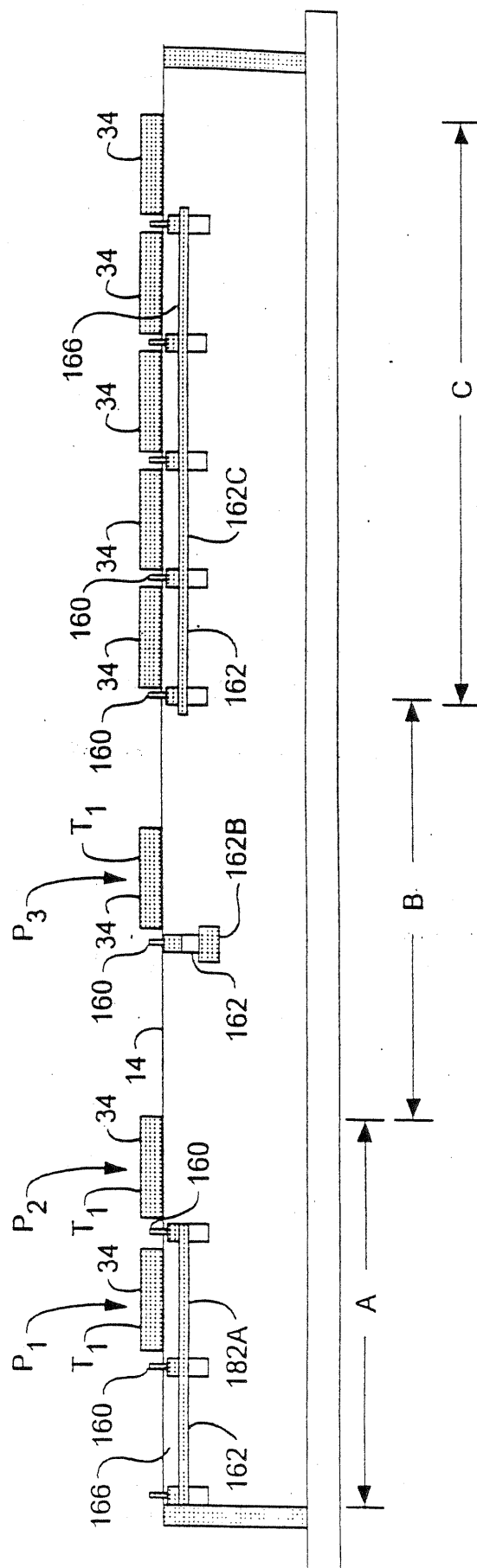


FIG. 8C

Quik Screen Reagent Formulations

- A1. 0.8 M Sodium/Potassium Phosphate pH 5.0
- B1. 1.0 M Sodium/Potassium Phosphate pH 5.0
- C1. 1.4 M Sodium/Potassium Phosphate pH 5.0
- D1. 1.8 M Sodium/Potassium Phosphate pH 5.0
- A2. 0.8 M Sodium/Potassium Phosphate pH 5.6
- B2. 1.0 M Sodium/Potassium Phosphate pH 5.6
- C2. 1.4 M Sodium/Potassium Phosphate pH 5.6
- D2. 1.8 M Sodium/Potassium Phosphate pH 5.6
- A3. 0.8 M Sodium/Potassium Phosphate pH 6.3
- B3. 1.0 M Sodium/Potassium Phosphate pH 6.3
- C3. 1.4 M Sodium/Potassium Phosphate pH 6.3
- D3. 1.8 M Sodium/Potassium Phosphate pH 6.3
- A4. 0.8 M Sodium/Potassium Phosphate pH 6.9
- B4. 1.0 M Sodium/Potassium Phosphate pH 6.9
- C4. 1.4 M Sodium/Potassium Phosphate pH 6.9
- D4. 1.8 M Sodium/Potassium Phosphate pH 6.9
- A5. 0.8 M Sodium/Potassium Phosphate pH 7.5
- B5. 1.0 M Sodium/Potassium Phosphate pH 7.5
- C5. 1.4 M Sodium/Potassium Phosphate pH 7.5
- D5. 1.8 M Sodium/Potassium Phosphate pH 7.5
- A6. 0.8 M Sodium/Potassium Phosphate pH 8.2
- B6. 1.0 M Sodium/Potassium Phosphate pH 8.2
- C6. 1.4 M Sodium/Potassium Phosphate pH 8.2
- D6. 1.8 M Sodium/Potassium Phosphate pH 8.2

FIG. 9

Detergent Screen 2 Reagent Formulations

1. 10% v/v Pluronic F-68
2. 10% v/v Anapoe 35
3. 10% v/v Anapoe 56
4. 10% v/v Anapoe 58
5. 10% v/v Anapoe X-114
6. 10% v/v Anapoe X-305
7. 10% v/v Anapoe X-405
8. 10% v/v Anapoe 20
9. 10% v/v Anapoe 80
10. 10% v/v Anapoe C₁₀E₆
11. 10% v/v Anapoe C₁₀E₉
12. 10% v/v Anapoe C₁₂E₁₀
13. 10% v/v Anapoe C₁₃E₆
14. 10% w/v IPTG
15. 1.5 mM n-Dodecyl-N,N-dimethylglycine
16. 7.0 mM HEGA-10
17. 7.1 mM C₈E₅
18. 8.0 mM CHAPS
19. 8.0 mM CHAPSO
20. 11.5 mM C-HEGA 11
21. 39 mM HEGA-9
22. 108 mM C-HEGA 9
23. 109 mM HEGA-8
24. 277 mM C-HEGA-8

Note: [mM] is that of the CMC of the detergent

FIG. 9
(Continued)

Detergent Screen 3 Reagent Formulations

1. 10% w/v BAM
 2. 0.006 mM n-Hexadecyl-b-D-maltoside
 3. 0.1 mM n-Tetradecyl-b-D-maltoside
 4. 0.33 mM n-Tridecyl-b-D-maltoside
 5. 0.9 mM Thesit
 6. 4.0 mM Zwittergent 3-14
 7. 5.9 mM n- Undecyl-b-D-maltoside
 8. 9.0 mM n-Decyl-b-D-thiomaltoside
 9. 15.0 mM FOS-Choline 12
 10. 25 mM n-Decanoylsucrose
 11. 29.0 mM l-S-Nonyl-b-D-thiogluconide
 12. 32.0 mM n-Nonyl-b-D-thiomaltoside
 13. 43.0 mM DDMAB
 14. 60.0 mM n-Nonyl-b-D-maltoside
 15. 76.0 mM Cymal-4
 16. ◇
-

17. 130 mM FOS-Choline-10
18. 190 mM FOS-Choline-9
19. 250 mM MEGA-9
20. 290 mM l-S-Heptyl-b-D-thiogluconide
21. 1.02 M FOS-Choline-8
22. 1.20 M Cymal-2
23. 3.30 M Zwittergent 3-08
24. 3.40 M Cymal-1

Note: [mM] is that of the CMC of the detergent

FIG. 9
(Continued)

Crystal Screen Reagent Formulations

1. 30% MPD, 0.1 M Na Acetate pH 4.6, 0.02 M Calcium Chloride
2. 0.4 M K, Na Tartrate
3. 0.4 M Ammonium Phosphate
4. 2.0 M Ammonium Sulfate, 0.1 M Tris HCl pH 8.5
5. 30% MPD, 0.1 M Na Hepes pH 7.5, 0.2 M Na Citrate
6. 30% PEG 4000, 0.1 M Tris HCl pH 8.5, 0.2 M Mg Chloride
7. 1.4 M Na Acetate, 0.1 M Na Cacodylate pH 6.5
8. 30% 2-Propanol, 0.1 M Na Cacodylate pH 6.5, 0.2 M Na Citrate
9. 30% PEG 4000, 0.1 M Na Citrate pH 5.6, 0.2 M Ammonium Acetate
10. 30% PEG 4000, 0.1 M Na Acetate pH 4.6, 0.2 M Ammonium Acetate
11. 1.0 M Ammonium Phosphate, 0.1 M Na Citrate pH 5.6
12. 30% 2-Propanol, 0.1 M Na Hepes pH 7.5, 0.2 M Mg Chloride
13. 30% PEG 400, 0.1 M Tris HCl pH 8.5, 0.2 M Na Citrate
14. 28% PEG 400, 0.1 M Na Hepes pH 7.5, 0.2 M Ca Chloride
15. 30% PEG 8000, 0.1 M Na Cacodylate pH 6.5, 0.2 M Ammonium Sulfate
16. 1.5 M Li Sulfate, 0.1 M Na Hepes pH 7.5
17. 30% PEG 4000, 0.1 M Tris HCl pH 8.5, 0.2 M Li Sulfate
18. 20% PEG 8000, 0.1 M Na Cacodylate pH 6.5, 0.2 M Mg Acetate
19. 30% 2-Propanol, 0.1 M Tris HCl pH 8.5, 0.2 M Ammonium Acetate
20. 25% PEG 4000, 0.1 M Na Acetate pH 4.6, 0.2 M Ammonium Sulfate
21. 30% MPD, 0.1 M Na Cacodylate pH 6.5, 0.2 M Mg Acetate
22. 30% PEG 4000, 0.1 M Tris HCl pH 8.5, 0.2 M Na Acetate
23. 30% PEG 400, 0.1 M Na Hepes pH 7.5, 0.2 M Mg Chloride
24. 20% 2-Propanol, 0.1 M Na Acetate pH 4.6, 0.2 M Ca Chloride

FIG. 9
(Continued)

Crystal Screen Reagent Formulations

25. 1.0 M Na Acetate, 0.1 M Imidazole pH 6.5
26. 30% MPD, 0.1 M Na Citrate pH 5.6, 0.2 M Ammonium Acetate
27. 20% 2-Propanol, 0.1 M Na Hepes pH 7.5, 0.2 M Na Citrate
28. 30% PEG 8000, 0.1 M Na Cacodylate pH 6.5, 0.2 M Na Acetate
29. 0.8 M K, Na Tartrate, 0.1 M Na Hepes pH 7.5
30. 30% PEG 8000, 0.2 M Ammonium Sulfate
31. 30% PEG 4000, 0.2 M Ammonium Sulfate
32. 2.0 M Ammonium Sulfate
33. 4.0 M Na Formate
34. 2.0 M Na Formate, 0.1 M Na Acetate pH 4.6
35. 1.6 M Na, K Phosphate, 0.1 M Na Hepes pH 7.5
36. 8% PEG 8000, 0.1 M Tris HCl pH 8.5
37. 8% PEG 4000, 0.1 M Na Acetate pH 4.6
38. 1.4 M Na Citrate, 0.1 M Na Hepes pH 7.5
39. 2% PEG 400, 2.0 M Ammonium Sulfate, 0.1 M Na Hepes pH 7.5
40. 20% 2-Propanol, 20% PEG 4000, 0.1 M Na Citrate pH 5.6
41. 10% 2-Propanol, 20% PEG 4000, 0.1 M Na Hepes pH 7.5
42. 20% PEG 8000, 0.05 M K Phosphate
43. 30% PEG 1500
44. 0.2 M Mg Formate
45. 18% PEG 8000, 0.1 M Na Cacodylate pH 6.5, 0.2 M Zn Acetate
46. 18% PEG 8000, 0.1 M Na Cacodylate pH 6.5, 0.2 M Ca Acetate
47. 2.0 M Ammonium Sulfate, 0.1 M Na Acetate pH 4.6
48. 2.0 M Ammonium Phosphate, 0.1 M Tris HCl pH 8.5

FIG. 9
(Continued)

Grid Screen Ammonium Sulfate Reagent Formulations

- A1. 0.1 M Citric Acid pH 4.0, 0.8 M Ammonium Sulfate
- B1. 0.1 M Citric Acid pH 4.0, 1.6 M Ammonium Sulfate
- C1. 0.1 M Citric Acid pH 4.0, 2.4 M Ammonium Sulfate
- D1. 0.1 M Citric Acid pH 4.0, 3.2 M Ammonium Sulfate
- A2. 0.1 M Citric Acid pH 5.0, 0.8 M Ammonium Sulfate
- B2. 0.1 M Citric Acid pH 5.0, 1.6 M Ammonium Sulfate
- C2. 0.1 M Citric Acid pH 5.0, 2.4 M Ammonium Sulfate
- D2. 0.1 M Citric Acid pH 5.0, 3.2 M Ammonium Sulfate
- A3. 0.1 M MES pH 6.0, 0.8 M Ammonium Sulfate
- B3. 0.1 M MES pH 6.0, 1.6 M Ammonium Sulfate
- C3. 0.1 M MES pH 6.0, 2.4 M Ammonium Sulfate
- D3. 0.1 M MES pH 6.0, 3.2 M Ammonium Sulfate
- A4. 0.1 M HEPES pH 7.0, 0.8 M Ammonium Sulfate
- B4. 0.1 M HEPES pH 7.0, 1.6 M Ammonium Sulfate
- C4. 0.1 M HEPES pH 7.0, 2.4 M Ammonium Sulfate
- D4. 0.1 M HEPES pH 7.0, 3.2 M Ammonium Sulfate
- A5. 0.1 M Tris pH 8.0, 0.8 M Ammonium Sulfate
- B5. 0.1 M Tris pH 8.0, 1.6 M Ammonium Sulfate
- C5. 0.1 M Tris pH 8.0, 2.4 M Ammonium Sulfate
- D5. 0.1 M Tris pH 8.0, 3.2 M Ammonium Sulfate
- A6. 0.1 M Bicine pH 9.0, 0.8 M Ammonium Sulfate
- B6. 0.1 M Bicine pH 9.0, 1.6 M Ammonium Sulfate
- C6. 0.1 M Bicine pH 9.0, 2.4 M Ammonium Sulfate
- D6. 0.1 M Bicine pH 9.0, 3.2 M Ammonium Sulfate

FIG. 9
(Continued)

Grid Screen MPD Reagent Formulations

- A1. 0.1 M Citric Acid pH 4.0, 10% 2-Methyl-2,4-pentanediol
- B1. 0.1 M Citric Acid pH 4.0, 20% 2-Methyl-2,4-pentanediol
- C1. 0.1 M Citric Acid pH 4.0, 40% 2-Methyl-2,4-pentanediol
- D1. 0.1 M Citric Acid pH 4.0, 65% 2-Methyl-2,4-pentanediol
- A2. 0.1 M Sodium Acetate trihydrate pH 5.0, 10% 2-Methyl-2,4-pentanediol
- B2. 0.1 M Sodium Acetate trihydrate pH 5.0, 20% 2-Methyl-2,4-pentanediol
- C2. 0.1 M Sodium Acetate trihydrate pH 5.0, 40% 2-Methyl-2,4-pentanediol
- D2. 0.1 M Sodium Acetate trihydrate pH 5.0, 65% 2-Methyl-2,4-pentanediol
- A3. 0.1 M MES pH 6.0, 10% 2-Methyl-2,4-pentanediol
- B3. 0.1 M MES pH 6.0, 20% 2-Methyl-2,4-pentanediol
- C3. 0.1 M MES pH 6.0, 40% 2-Methyl-2,4-pentanediol
- D3. 0.1 M MES pH 6.0, 65% 2-Methyl-2,4-pentanediol
- A4. 0.1 M HEPES pH 7.0, 10% 2-Methyl-2,4-pentanediol
- B4. 0.1 M HEPES pH 7.0, 20% 2-Methyl-2,4-pentanediol
- C4. 0.1 M HEPES pH 7.0, 40% 2-Methyl-2,4-pentanediol
- D4. 0.1 M HEPES pH 7.0, 65% 2-Methyl-2,4-pentanediol
- A5. 0.1 M Tris pH 8.0, 10% 2-Methyl-2,4-pentanediol
- B5. 0.1 M Tris pH 8.0, 20% 2-Methyl-2,4-pentanediol
- C5. 0.1 M Tris pH 8.0, 40% 2-Methyl-2,4-pentanediol
- D5. 0.1 M Tris pH 8.0, 65% 2-Methyl-2,4-pentanediol
- A6. 0.1 M Bicine pH 9.0, 10% 2-Methyl-2,4-pentanediol
- B6. 0.1 M Bicine pH 9.0, 20% 2-Methyl-2,4-pentanediol
- C6. 0.1 M Bicine pH 9.0, 40% 2-Methyl-2,4-pentanediol
- D6. 0.1 M Bicine pH 9.0, 65% 2-Methyl-2,4-pentanediol

FIG. 9
(Continued)

Grid Screen Sodium Chloride Reagent Formulations

- A1.** 0.1 M Citric Acid pH 4.0, 1.0 M Sodium Chloride
- B1.** 0.1 M Citric Acid pH 4.0, 2.0 M Sodium Chloride
- C1.** 0.1 M Citric Acid pH 4.0, 3.0 M Sodium Chloride
- D1.** 0.1 M Citric Acid pH 4.0, 4.0 M Sodium Chloride
- A2.** 0.1 M Citric Acid pH 5.0, 1.0 M Sodium Chloride
- B2.** 0.1 M Citric Acid pH 5.0, 2.0 M Sodium Chloride
- C2.** 0.1 M Citric Acid pH 5.0, 3.0 M Sodium Chloride
- D2.** 0.1 M Citric Acid pH 5.0, 4.0 M Sodium Chloride
- A3.** 0.1 M MES pH 6.0, 1.0 M Sodium Chloride
- B3.** 0.1 M MES pH 6.0, 2.0 M Sodium Chloride
- C3.** 0.1 M MES pH 6.0, 3.0 M Sodium Chloride
- D3.** 0.1 M MES pH 6.0, 4.0 M Sodium Chloride
- A4.** 0.1 M HEPES pH 7.0, 1.0 M Sodium Chloride
- B4.** 0.1 M HEPES pH 7.0, 2.0 M Sodium Chloride
- C4.** 0.1 M HEPES pH 7.0, 3.0 M Sodium Chloride
- D4.** 0.1 M HEPES pH 7.0, 4.0 M Sodium Chloride
- A5.** 0.1 M Tris pH 8.0, 1.0 M Sodium Chloride
- B5.** 0.1 M Tris pH 8.0, 2.0 M Sodium Chloride
- C5.** 0.1 M Tris pH 8.0, 3.0 M Sodium Chloride
- D5.** 0.1 M Tris pH 8.0, 4.0 M Sodium Chloride
- A6.** 0.1 M Bicine pH 9.0, 1.0 M Sodium Chloride
- B6.** 0.1 M Bicine pH 9.0, 2.0 M Sodium Chloride
- C6.** 0.1 M Bicine pH 9.0, 3.0 M Sodium Chloride
- D6.** 0.1 M Bicine pH 9.0, 4.0 M Sodium Chloride

FIG. 9
(Continued)

Grid Screen PEG 6000 Reagent Formulations

- A1. 0.1 M Citric Acid pH 4.0, 5% Polyethylene Glycol 6000
- B1. 0.1 M Citric Acid pH 4.0, 10% Polyethylene Glycol 6000
- C1. 0.1 M Citric Acid pH 4.0, 20% Polyethylene Glycol 6000
- D1. 0.1 M Citric Acid pH 4.0, 30% Polyethylene Glycol 6000
- A2. 0.1 M Citric Acid pH 5.0, 5% Polyethylene Glycol 6000
- B2. 0.1 M Citric Acid pH 5.0, 10% Polyethylene Glycol 6000
- C2. 0.1 M Citric Acid pH 5.0, 20% Polyethylene Glycol 6000
- D2. 0.1 M Citric Acid pH 5.0, 30% Polyethylene Glycol 6000
- A3. 0.1 M MES pH 6.0, 5% Polyethylene Glycol 6000
- B3. 0.1 M MES pH 6.0, 10% Polyethylene Glycol 6000
- C3. 0.1 M MES pH 6.0, 20% Polyethylene Glycol 6000
- D3. 0.1 M MES pH 6.0, 30% Polyethylene Glycol 6000
- A4. 0.1 M HEPES pH 7.0, 5% Polyethylene Glycol 6000
- B4. 0.1 M HEPES pH 7.0, 10% Polyethylene Glycol 6000
- C4. 0.1 M HEPES pH 7.0, 20% Polyethylene Glycol 6000
- D4. 0.1 M HEPES pH 7.0, 30% Polyethylene Glycol 6000
- A5. 0.1 M Tris pH 8.0, 5% Polyethylene Glycol 6000
- B5. 0.1 M Tris pH 8.0, 10% Polyethylene Glycol 6000
- C5. 0.1 M Tris pH 8.0, 20% Polyethylene Glycol 6000
- D5. 0.1 M Tris pH 8.0, 30% Polyethylene Glycol 6000
- A6. 0.1 M Bicine pH 9.0, 5% Polyethylene Glycol 6000
- B6. 0.1 M Bicine pH 9.0, 10% Polyethylene Glycol 6000
- C6. 0.1 M Bicine pH 9.0, 20% Polyethylene Glycol 6000
- D6. 0.1 M Bicine pH 9.0, 30% Polyethylene Glycol 6000

FIG. 9
(Continued)

Grid Screen PEG/LiCl Reagent Formulations

- A1. 0.1 M Citric Acid pH 4.0, 1.0 M Lithium Chloride
- B1. 0.1 M Citric Acid pH 4.0, 10% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- C1. 0.1 M Citric Acid pH 4.0, 20% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- D1. 0.1 M Citric Acid pH 4.0, 30% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- A2. 0.1 M Citric Acid pH 5.0, 1.0 M Lithium Chloride
- B2. 0.1 M Citric Acid pH 5.0, 10% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- C2. 0.1 M Citric Acid pH 5.0, 20% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- D2. 0.1 M Citric Acid pH 5.0, 30% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- A3. 0.1 M MES pH 6.0, 1.0 M Lithium Chloride
- B3. 0.1 M MES pH 6.0, 10% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- C3. 0.1 M MES pH 6.0, 20% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- D3. 0.1 M MES pH 6.0, 30% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- A4. 0.1 M HEPES pH 7.0, 1.0 M Lithium Chloride
- B4. 0.1 M HEPES pH 7.0, 10% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- C4. 0.1 M HEPES pH 7.0, 20% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- D4. 0.1 M HEPES pH 7.0, 30% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- A5. 0.1 M Tris pH 8.0, 1.0 M Lithium Chloride
- B5. 0.1 M Tris pH 8.0, 10% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- C5. 0.1 M Tris pH 8.0, 20% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- D5. 0.1 M Tris pH 8.0, 30% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- A6. 0.1 M Bicine pH 9.0, 1.0 M Lithium Chloride
- B6. 0.1 M Bicine pH 9.0, 10% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- C6. 0.1 M Bicine pH 9.0, 20% Polyethylene Glycol 6000, 1.0 M Lithium Chloride
- D6. 0.1 M Bicine pH 9.0, 30% Polyethylene Glycol 6000, 1.0 M Lithium Chloride

FIG. 9
(Continued)

PEG/Ion Screen Reagent Formulations

1. 0.2 M Sodium Fluoride, 20% PEG 3350
2. 0.2 M Potassium Fluoride, 20% PEG 3350
3. 0.2 M Ammonium Fluoride, 20% PEG 3350
4. 0.2 M Lithium Chloride, 20% PEG 3350
5. 0.2 M Magnesium Chloride, 20% PEG 3350
6. 0.2 M Sodium Chloride, 20% PEG 3350
7. 0.2 M Calcium Chloride, 20% PEG 3350
8. 0.2 M Potassium Chloride, 20% PEG 3350
9. 0.2 M Ammonium Chloride, 20% PEG 3350
10. 0.2 M Sodium Iodide, 20% PEG 3350
11. 0.2 M Potassium Iodide, 20% PEG 3350
12. 0.2 M Ammonium Iodide, 20% PEG 3350
13. 0.2 M Sodium Thiocyanate, 20% PEG 3350
14. 0.2 M Potassium Thiocyanate, 20% PEG 3350
15. 0.2 M Lithium Nitrate, 20% PEG 3350
16. 0.2 M Magnesium Nitrate, 20% PEG 3350
17. 0.2 M Sodium Nitrate, 20% PEG 3350
18. 0.2 M Potassium Nitrate, 20% PEG 3350
19. 0.2 M Ammonium Nitrate, 20% PEG 3350
20. 0.2 M Magnesium Formate, 20% PEG 3350
21. 0.2 M Sodium Formate, 20% PEG 3350
22. 0.2 M Potassium Formate, 20% PEG 3350
23. 0.2 M Ammonium Formate, 20% PEG 3350
24. 0.2 M Lithium Acetate, 20% PEG 3350

FIG. 9
(Continued)

PEG/Ion Screen Reagent Formulations

25. 0.2 M Magnesium Acetate, 20% PEG 3350
26. 0.2 M Zinc Acetate, 20% PEG 3350
27. 0.2 M Sodium Acetate, 20% PEG 3350
28. 0.2 M Calcium Acetate, 20% PEG 3350
29. 0.2 M Potassium Acetate, 20% PEG 3350
30. 0.2 M Ammonium Acetate, 20% PEG 3350
31. 0.2 M Lithium Sulfate, 20% PEG 3350
32. 0.2 M Magnesium Sulfate, 20% PEG 3350
33. 0.2 M Sodium Sulfate, 20% PEG 3350
34. 0.2 M Potassium Sulfate, 20% PEG 3350
35. 0.2 M Ammonium Sulfate, 20% PEG 3350
36. 0.2 M di-Sodium Tartrate, 20% PEG 3350
37. 0.2 M Potassium Sodium Tartrate, 20% PEG 3350
38. 0.2 M di-Ammonium Tartrate, 20% PEG 3350
39. 0.2 M Sodium dihydrogen Phosphate, 20% PEG 3350
40. 0.2 M di-Sodium hydrogen Phosphate, 20% PEG 3350
41. 0.2 M Potassium dihydrogen Phosphate, 20% PEG 3350
42. 0.2 M di-Potassium hydrogen Phosphate, 20% PEG 3350
43. 0.2 M Ammonium dihydrogen Phosphate, 20% PEG 3350
44. 0.2 M di-Ammonium hydrogen Phosphate, 20% PEG 3350
45. 0.2 M tri-Lithium Citrate, 20% PEG 3350
46. 0.2 M tri-Sodium Citrate, 20% PEG 3350
47. 0.2 M tri-Potassium Citrate, 20% PEG 3350
48. 0.2 M di-Ammonium hydrogen Citrate, 20% PEG 3350

FIG. 9
(Continued)

MembFac Reagent Formulations

1. 12% MPD, 0.1 M Na Acetate pH 4.6, 0.1 M Na Chloride
2. 12% PEG 4000, 0.1 M Na Acetate pH 4.6, 0.1 M Zn Acetate
3. 10% PEG 4000, 0.1 M Na Acetate pH 4.6, 0.2 M Ammonium Sulfate
4. 12% Isopropanol, 0.1 M Na Acetate pH 4.6, 0.1 M Na Chloride
5. 12% PEG 4000, 0.1 M Na Acetate pH 4.6
6. 1.0 M Ammonium Sulfate, 0.1 M Na Acetate pH 4.6
7. 1.0 M Mg Sulfate, 0.1 M Na Acetate pH 4.6
8. 18% PEG 400, 0.1 M Na Acetate pH 4.6, 0.1 M Mg Chloride
9. 1.0 M Ammonium Phosphate, 0.1 M Na Acetate pH 4.6, 0.1 M Li Sulfate
10. 12% PEG 6000, 0.1 M Na Acetate pH 4.6, 0.1 M Na Chloride
11. 12% PEG 6000, 0.1 M Na Acetate pH 4.6, 0.1 M Mg Chloride
12. 18% PEG 400, 0.1 M Na Citrate pH 5.6, 0.1 M Na Chloride
13. 12% PEG 4000, 0.1 M Na Citrate pH 5.6, 0.1 M Li Sulfate
14. 10% Isopropanol, 0.1 M Na Citrate pH 5.6, 0.1 M Na Citrate
15. 12% MPD, 0.1 M Na Citrate pH 5.6, 0.1 M Na Chloride
16. 1.0 M Mg Sulfate, 0.1 M Na Citrate pH 5.6
17. 12% PEG 4000, 0.1 M Na Citrate pH 5.6, 0.1 M Na Chloride
18. 12% PEG 6000, 0.1 M Na Citrate pH 5.6, 0.1 M Li Sulfate
19. 4% MPD, 0.1 M Na Citrate pH 5.6, 0.1 M Mg Chloride
20. 0.1 M Na Chloride, 0.1 M Na Citrate pH 5.6
21. 4% PEG 400, 0.1 M Na Citrate pH 5.6, 0.1 M Li Sulfate
22. 1.0 M Ammonium Sulfate, 0.1 M ADA pH 6.5
23. 12% PEG 4000 2% Isopropanol, 0.1 M ADA pH 6.5, 0.1 M Li Sulfate
24. 1.0 M di-Ammonium Phosphate, 0.1 M ADA pH 6.5

FIG. 9
(Continued)

MembFac Reagent Formulations

25. 12% PEG 6000, 0.1 M ADA pH 6.5, 0.1 M Mg Chloride
26. 12% MPD, 0.1 M ADA pH 6.5
27. 1.0 M Mg Sulfate, 0.1 M ADA pH 6.5, 0.1 M Li Sulfate
28. 4% PEG 400, 0.1 M ADA pH 6.5, 0.3 M Li Sulfate
29. 1.0 M di-Na/K Phosphate, 0.1 Na Hepes pH 7.5, 0.1 M Ammonium Sulfate
30. 10% PEG 4000, 0.1 Na Hepes pH 7.5, 0.1 M Na Chloride
31. 18% PEG 400, 0.1 Na Hepes pH 7.5, 0.1 M Mg Chloride
32. 1.0 M K/Na Tartrate, 0.1 Na Hepes pH 7.5
33. 18% PEG 400, 0.1 Na Hepes pH 7.5, 0.1 M Ammonium Sulfate
34. 10% PEG 4000, 0.1 Na Hepes pH 7.5, 0.1 M Ammonium Sulfate
35. 12% MPD, 0.1 Na Hepes pH 7.5, 0.1 M Na Citrate
36. 1.0 M Na Citrate, 0.1 Na Hepes pH 7.5
37. 4% PEG 400, 0.1 Na Hepes pH 7.5, 0.6 M Mg Sulfate
38. 4% MPD, 0.1 Na Hepes pH 7.5, 0.6 M Mg Sulfate
39. 0.1 M K/Na Tartrate, 0.1 Na Hepes pH 7.5, 0.1 M Li Sulfate
40. 12% MPD, 0.1 M Tris HCl pH 8.5, 0.1 M Li Sulfate
41. 0.5 M di-Na/K Phosphate, 0.1 Tris HCl pH 8.5, 0.1 Ammonium Phosphate
42. 0.1 M Na Acetate, 0.1 Tris HCl pH 8.5
43. 0.1 M Na Chloride, 0.1 Tris HCl pH 8.5
44. 12% PEG 6000, 0.1 Tris HCl pH 8.5, 0.1 M Ammonium Phosphate
45. 0.4 M Mg Sulfate, 0.1 Tris HCl pH 8.5, 0.1 M K/Na Tartrate
46. 0.2 M Li Sulfate, 0.1 Tris HCl pH 8.5
47. 0.5 M Ammonium Sulfate, 0.1 Tris HCl pH 8.5
48. 5% PEG 400, 0.1 Tris HCl pH 8.5, 0.1 M Na Citrate

FIG. 9
(Continued)

Detergent Screen 1 Reagent Formulations

1. 0.08 mM $C_{12}E_9$
2. 0.11 mM $C_{12}E_8$
3. 0.17 mM n-Dodecyl-b-D-maltoside
4. 0.20 mM Sucrose monolaurate
5. 0.56 mM CYMAL-6
6. 0.90 mM TRITON X-100
7. 1.00 mM CTAB
8. 1.40 mM Deoxy BigChap
9. 1.80 mM n-Decyl-b-D-maltoside
10. 2.00 mM LDAO
11. 2.40 mM CYMAL-5
12. 4.00 mM ZWITTERGENT 3-12
13. 6.50 mM Nonyl-b-D-glucoside
14. 9.00 mM l-S-octyl-b-D-thiogluconide
15. 10.4 mM DDAO
16. 19.5 mM HECAMEG
17. 24.4 mM n-Octanoylsucrose
18. 30.0 mM Heptyl-b-D-thiogluconide
19. 24.5 mM n-Octyl-b-D-glucoside
20. 34.5 mM CYMAL-3
21. 35.0 mM C-HEGA-10
22. 40.0 mM ZWITTERGENT 3-10
23. 79.0 mM MEGA-8
24. 250.0 mM n-Hexyl-b-D-glucoside

Note: [mM] is that of the CMC of the detergent

FIG. 9
(Continued)

Crystal Screen Cryo Reagent Formulations

1. 30% MPD, 0.1 M Na Acetate pH 4.6, 0.02 M Calcium Chloride
2. 0.26 M K, Na Tartrate, 35% Glycerol
3. 0.26 M Ammonium Phosphate, 35% Glycerol
4. 1.5 M Ammonium Sulfate, 0.075 M Tris HCl pH 8.5, 25% Glycerol
5. 30% MPD, 0.1 M Sodium Hepes pH 7.5, 0.2 M sodium Citrate
6. 24% PEG 4000, 0.08 M Tris HCl pH 8.5, 0.16 M Magnesium Chloride, 20% Glycerol
7. 0.98 M Sodium Acetate, 0.07 M Na Cacodylate pH 6.5, 30% Glycerol
8. 21% iso-Propanol, 0.07 M Na Cacodylate pH 6.5, 0.14 M Sodium Citrate, 30% Glycerol
9. 25.5% PEG 4000, 0.085 M Na Citrate pH 5.6, 0.17 M Ammonium Acetate, 15% Glycerol
10. 25.5% PEG 4000, 0.085 M Na Acetate pH 4.6, 0.17 M Ammonium Acetate, 15% Glycerol
11. 0.7 M Ammonium Phosphate, 0.07 M Na Citrate pH 5.6, 30% Glycerol
12. 27% iso-Propanol, 0.09 M Na Hepes pH 7.5, 0.18 M Magnesium Chloride, 10% Glycerol
13. 30% PEG 400, 0.1 M Tris HCl pH 8.5, 0.2 M Sodium Citrate
14. 26.6% PEG 400, 0.095 M Na Hepes pH 7.5, 0.19 M Calcium Chloride, 5% Glycerol
15. 25.5% PEG 8000, 0.085 M Na Cacodylate pH 6.5, 0.17 M Ammonium Sulfate, 15 % Glycerol
16. 1.125 M Lithium Sulfate, 0.075 M Na Hepes pH 7.5, 25% Glycerol
17. 25.5% PEG 4000, 0.085 M Tris HCl pH 8.5, 0.17 M Lithium Sulfate, 15% Glycerol
18. 16% PEG 8000, 0.08 M Na Cacodylate pH 6.5, 0.16 M Magnesium Acetate, 20% Glycerol
19. 24% iso-Propanol, 0.08 M Tris HCl pH 8.5, 0.16 M Ammonium Acetate, 20% Glycerol
20. 20% PEG 4000, 0.08 M Na Acetate pH 4.6, 0.16 M Ammonium Sulfate, 20% Glycerol
21. 30% MPD, 0.1 M Na Cacodylate pH 6.5, 0.2 M Magnesium Acetate
22. 25.5% PEG 4000, 0.085 M Tris HCl pH 8.5, 0.17 M Sodium Acetate, 15% Glycerol
23. 30% PEG 400, 0.1 M NA Hepes pH 7.5, 0.2 M Magnesium Chloride
24. 14% iso-Propanol, 0.07 M Na Acetate pH 4.6, 0.14 M Calcium Chloride, 30% Glycerol

FIG. 9

(Continued)

Crystal Screen Cryo Reagent Formulations

25. 0.7 M Sodium Acetate, 0.07 M Imidazole pH 6.5, 30% Glycerol
26. 30% MPD, 0.1 M Na Citrate pH 5.6, 0.2 M Ammonium Acetate
27. 14% iso- Propanol, 0.07 M NA Hepes pH 7.5, 0.14 M Sodium Citrate, 30% Glycerol
28. 25.5% PEG 8000, 0.085 M Na Cacodylate pH 6.5, 0.17 M Sodium Acetate, 15% Glycerol
29. 0.52 M K, Na Tartrate, 0.065 M Na Hepes pH 7.5, 35% Glycerol
30. 25.5% PEG 8000, 0.17 M Ammonium Sulfate, 15% Glycerol
31. 25.5% PEG 4000, 0.17 M Ammonium Sulfate, 15% Glycerol
32. 1.5 M Ammonium Sulfate, 25% Glycerol
33. 3.6 M Sodium Formate, 10% Glycerol
34. 1.4 M Sodium Formate, 0.07 M Na Acetate pH 4.6, 30% Glycerol
35. 1.2 M Na, K Phosphate, 0.075 M Na Hepes pH 7.5, 25% Glycerol
36. 5.2% PEG 8000, 0.065 M Tris Hcl pH 8.5, 35% Glycerol
37. 5.6% PEG 4000, 0.07 M Na Acetate pH 4.6, 30% Glycerol
38. 1.26 M Sodium Citrate, 0.09 M Na Hepes pH 7.5, 10% Glycerol
39. 1.7% PEG 400, 0.085 M Na Hepes pH 7.5, 1.7 M Ammonium Sulfate, 15% Glycerol
40. 19% iso-Propanol, 0.095 M Na Citrate pH 5.6, 19% PEG 4000, 5% Glycerol
41. 8.5% iso-Propanol, 0.085 M Na Hepes pH 7.5, 17% PEG 4000, 15% Glycerol
42. 16% PEG 8000, 0.04 M Potassium Phosphate, 20% Glycerol
43. 24% PEG 1500, 20% Glycerol
44. 0.1 M Magnesium Formate, 50% Glycerol
45. 14.4% PEG 8000, 0.08 M Na Cacodylate pH 6.5, 0.16 M Zinc Acetate, 20% Glycerol
46. 14.4% PEG 8000, 0.08 M Na Cacodylate pH 6.5, 0.16 M Calcium Acetate, 20% Glycerol
47. 1.6 M Ammonium Sulfate, 0.08 M Na Acetate pH 4.6, 20% Glycerol
48. 1.6 M Ammonium Phosphate, 0.08 M Tris HCl pH 8.5, 20% Glycerol

FIG. 9
(Continued)

Low Ionic Strength Screen Reagent Formulations

Buffers

1. 0.05 M Potassium chloride pH 2.0
2. 0.05 M Citric acid pH 3.0
3. 0.05 M Citric acid pH 3.5
4. 0.05 M Citric acid pH 4.0
5. 0.05 M Citric acid pH 4.5
6. 0.05 M Citric acid pH 5.0
7. 0.05 M Citric acid pH 5.5
8. 0.05 M MES pH 6.0
9. 0.05 M Bis-Tris pH 6.5
10. 0.05 M Imidazole pH 7.0
11. 0.05 M Hepes pH 7.5
12. 0.05 M Tris pH 8.0
13. 0.05 M Tris pH 8.5
14. 0.05 M Glycine pH 9.0
15. 0.05 M Glycine pH 9.5
16. 0.05 M Glycine pH 10.0
17. 0.05 M di-sodium hydrogen phosphate pH 11.0
18. 0.05 M di-sodium hydrogen phosphate pH 12.0

Precipitants

- A. 4% w/v Polyethylene glycol 3350
- B. 8% w/v Polyethylene glycol 3350
- C. 12% w/v Polyethylene glycol 3350
- D. 16% w/v Polyethylene glycol 3350
- E. 20% w/v Polyethylene glycol 3350
- F. 24% w/v Polyethylene glycol 3350

Dehydrant

24% w/v Polyethylene glycol 3350

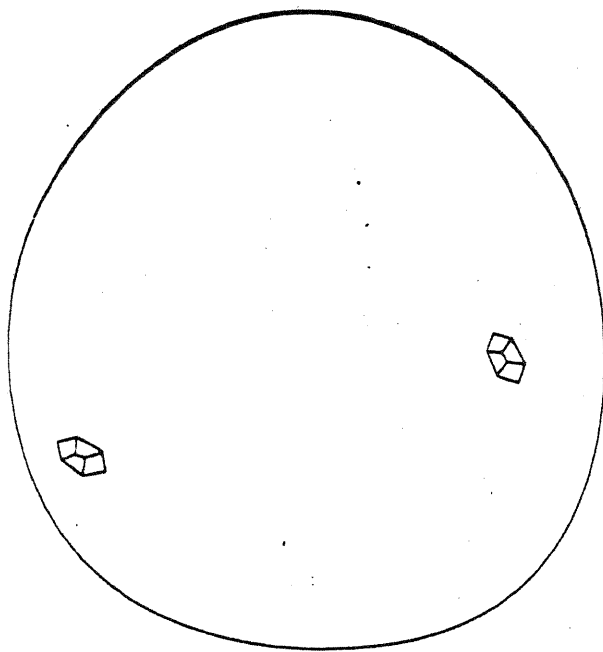


FIG. 10A

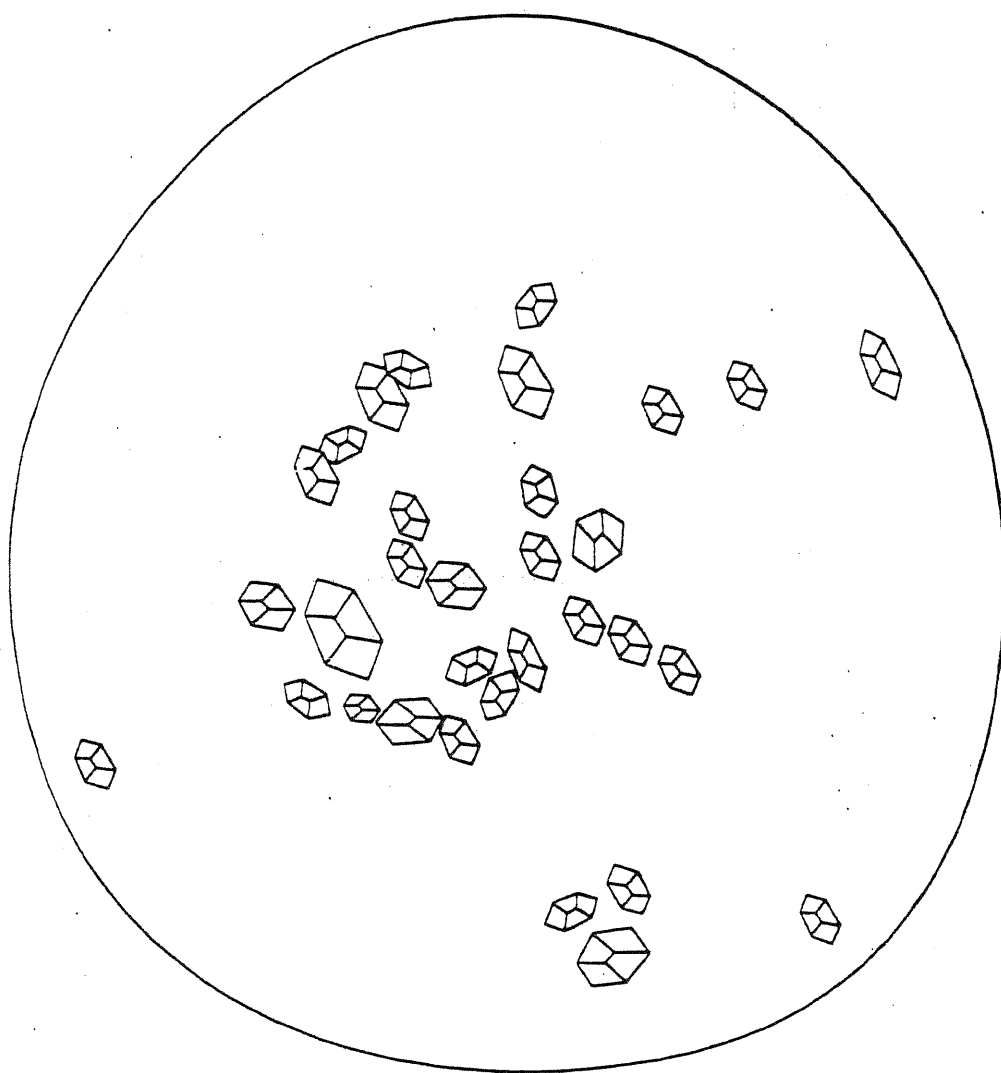


FIG. 10B

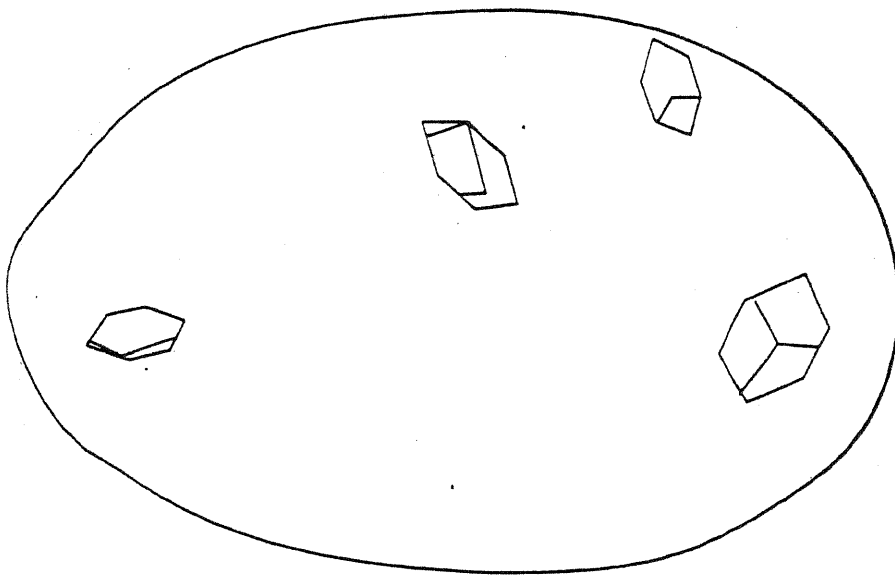


FIG. 10C

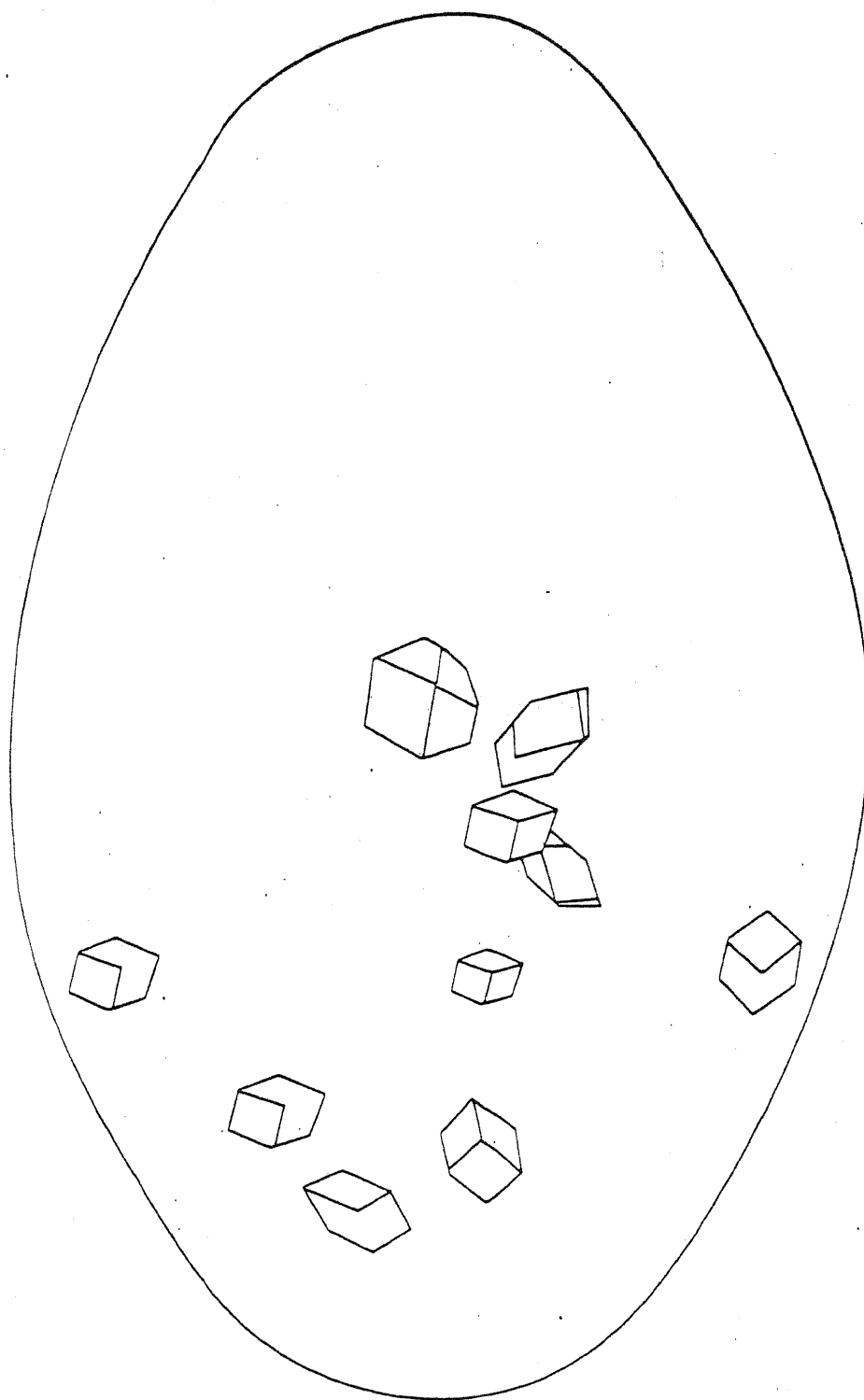


FIG. 10D

Concentration of CaCl ₂ (mM)	pH					
	4.1	4.3	4.5	4.7	4.9	5.1
12.5	1.6 A 8.3 B 75.0 C 19.3 D 145.8 W	1.6 A 8.3 B 75.0 C 16.9 D 148.3 W	1.6 A 8.3 B 75.0 C 14.1 D 151.0 W	1.6 A 8.3 B 75.0 C 11.4 D 153.7 W	1.6 A 8.3 B 75.0 C 8.7 D 156.4 W	1.6 A 8.3 B 75.0 C 6.3 D 158.8 W
17.5	2.2 A 8.3 B 75.0 C 19.3 D 145.2 W	2.2 A 8.3 B 75.0 C 16.9 D 147.6 W	2.2 A 8.3 B 75.0 C 14.1 D 150.3 W	2.2 A 8.3 B 75.0 C 11.4 D 153.1 W	2.2 A 8.3 B 75.0 C 8.7 D 155.8 W	2.2 A 8.3 B 75.0 C 6.3 D 158.2 W
22.5	2.8 A 8.3 B 75.0 C 19.3 D 144.6 W	2.8 A 8.3 B 75.0 C 16.9 D 147.0 W	2.8 A 8.3 B 75.0 C 14.1 D 149.7 W	2.8 A 8.3 B 75.0 C 11.4 D 152.5 W	2.8 A 8.3 B 75.0 C 8.7 D 155.2 W	2.8 A 8.3 B 75.0 C 6.3 D 157.6 W
27.5	3.4 A 8.3 B 75.0 C 19.3 D 143.9 W	3.4 A 8.3 B 75.0 C 16.9 D 146.4 W	3.4 A 8.3 B 75.0 C 14.1 D 149.1 W	3.4 A 8.3 B 75.0 C 11.4 D 151.9 W	3.4 A 8.3 B 75.0 C 8.7 D 154.5 W	3.4 A 8.3 B 75.0 C 6.3 D 157.0 W

FIG. 11

A = volume of 2M CaCl_2
 B = volume of 3M NaOAc
 C = volume of 100% MPD
 D = volume of 1M HCl
 W = volume of 100% water

Crystal Screen 2 Reagent Formulations

1. 10% PEG 6000, 2.0 M Na chloride
2. 0.5 M NaCl, 0.01 M CTAB, 0.01 M Mg chloride
3. 25% Ethylene glycol
4. 35% Dioxane
5. 5% Isopropanol, 2.0 M Ammonium sulfate
6. 1.0 M Imidazole pH 7.0
7. 10% PEG 1000, 10% PEG 8000
8. 10% Ethanol, 1.5 M Na chloride
9. 2.0 M Na chloride, 0.1 M Na acetate pH 4.6
10. 30% MPD, 0.1 M Na Acetate pH 4.6, 0.2 M NaCl
11. 1.0 M 1,6 Hexanediol, 0.1 M Na Acetate pH 4.6, 0.01 M Co chloride
12. 30% PEG 400, 0.1 M Na acetate pH 4.6, 0.1 M Cd chloride
13. 30% PEG MME 2000, 0.1 M Na Acetate pH 4.6, 0.2 M Ammonium sulfate
14. 2.0 M Ammonium sulfate, 0.1 M Na Citrate pH 5.6, 0.2 M K/Na Tartrate
15. 1.0 M Li sulfate, 0.1 M Na Citrate pH 5.6, 0.5 M Ammonium sulfate
16. 2% Polyethyleneimine, 0.1 M Na Citrate pH 5.6, 0.5 M Na chloride
17. 35% tert-butanol, 0.1 M Na citrate pH 5.6
18. 10% Jeffamine M-600, 0.1 M Na citrate pH 5.6, 0.01 M Ferric chloride
19. 2.5 M 1,6 Hexanediol, 0.1 M Na citrate pH 5.6
20. 1.6 M Mg sulfate, 0.1 M MES pH 6.5
21. 2.0 M Na chloride, 0.1 M MES pH 6.5, 0.2 M Na/K Phosphate
22. 12% PEG 20,000, 0.1 M MES pH 6.5
23. 10% Dioxane, 0.1 M MES pH 6.5, 1.6 M Ammonium sulfate
24. 30% Jeffamine M-600, 0.1 M MES pH 6.5, 0.05 M Cs chloride

FIG. 11
(Continued)

Crystal Screen 2 Reagent Formulations

25. 1.8 M Ammonium sulfate, 0.1 M MES pH 6.5, 0.01 M Co chloride
26. 30% PEG MME 5000, 0.1 M MES pH 6.5, 0.2 M Ammonium sulfate
27. 25% PEG MME 550, 0.1 M MES pH 6.5, 0.01 M Zn sulfate
28. 1.6 M Sodium citrate pH 6.5
29. 30% MPD, 0.1 M Hepes pH 7.5, 0.5 M Ammonium sulfate
30. 10% PEG 6000, 0.1 M Hepes pH 7.5, 5% MPD
31. 20% Jeffamine M-600, 0.1 M Hepes pH 7.5
32. 1.6 M Ammonium sulfate, 0.1 M Hepes pH 7.5, 0.1 M Na chloride
33. 2.0 M Ammonium formate, 0.1 M Hepes pH 7.5
34. 1.0 M Na acetate, 0.1 M Hepes pH 7.5, 0.05 M Cd sulfate
35. 70% MPD, 0.1 M Hepes pH 7.5
36. 4.3 M Na chloride, 0.1 M Hepes pH 7.5
37. 10% PEG 8000, 0.1 M Hepes pH 7.5, 8% Ethylene glycol
38. 20% PEG 10,000, 0.1 M Hepes pH 7.5
39. 3.4 M 1,6 Hexanediol, 0.1 M Tris pH 8.5, 0.2 M Mg chloride
40. 25% tert-butanol, 0.1 M Tris pH 8.5, 0.1 M Ca chloride
41. 1.0 M Li sulfate, 0.1 M Tris pH 8.5, 0.01 M Ni chloride
42. 12% Glycerol, 0.1 M Tris pH 8.5, 1.5 M Ammonium sulfate
43. 50% MPD, 0.1 M Tris pH 8.5, 0.2 M Ammonium phosphate
44. 20% Ethanol, 0.1 M Tris pH 8.5
45. 20% PEG MME 2000, 0.1 M Tris pH 8.5, 0.01 M Ni chloride
46. 30% PEG MME 550, 0.1 M Bicine pH 9.0, 0.1 M Na chloride
47. 2.0 M Mg chloride, 0.1 M Bicine pH 9.0
48. 10% PEG 20,000, 0.1 M Bicine pH 9.0, 2% Dioxane

FIG. 11
(Continued)