

FIG. 1A

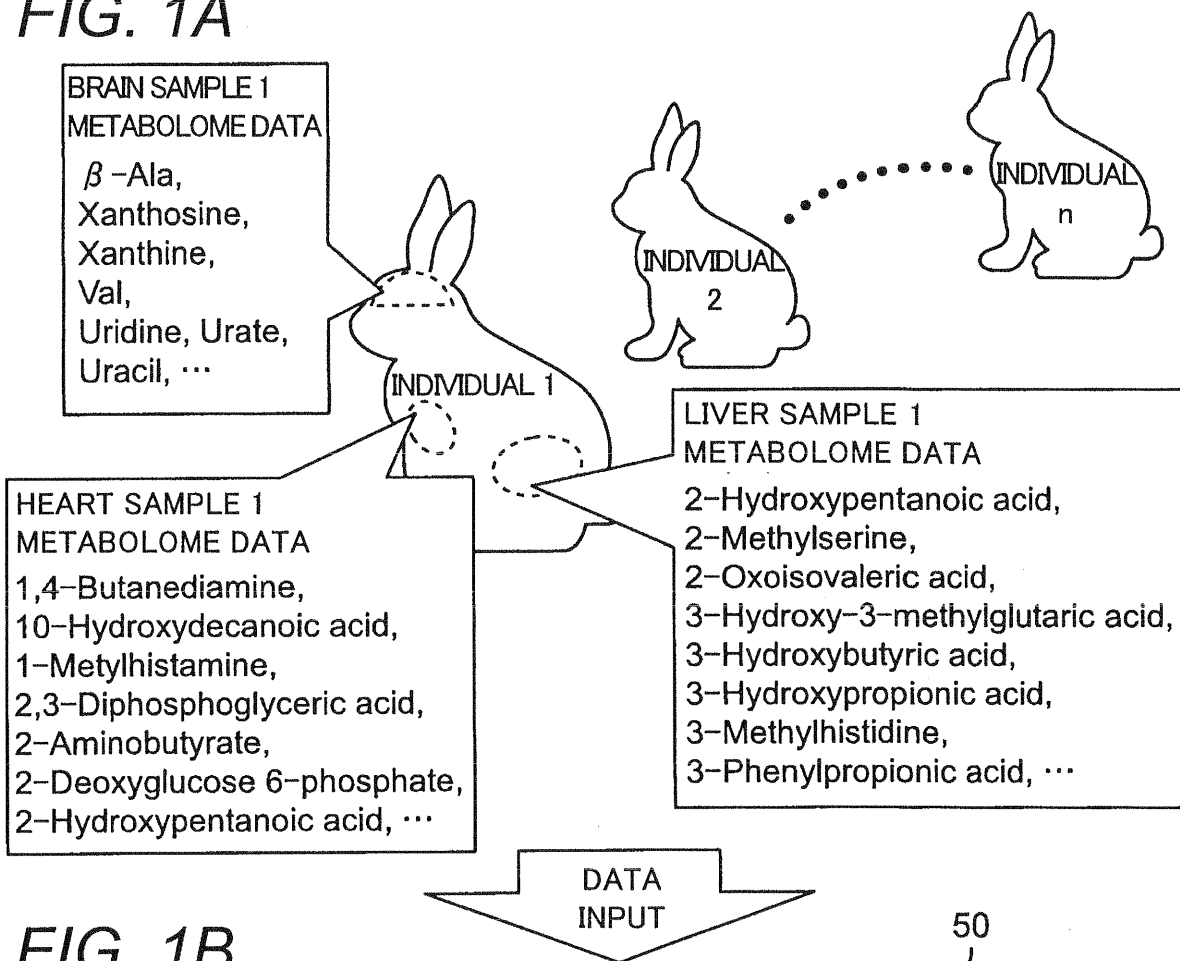


FIG. 1B

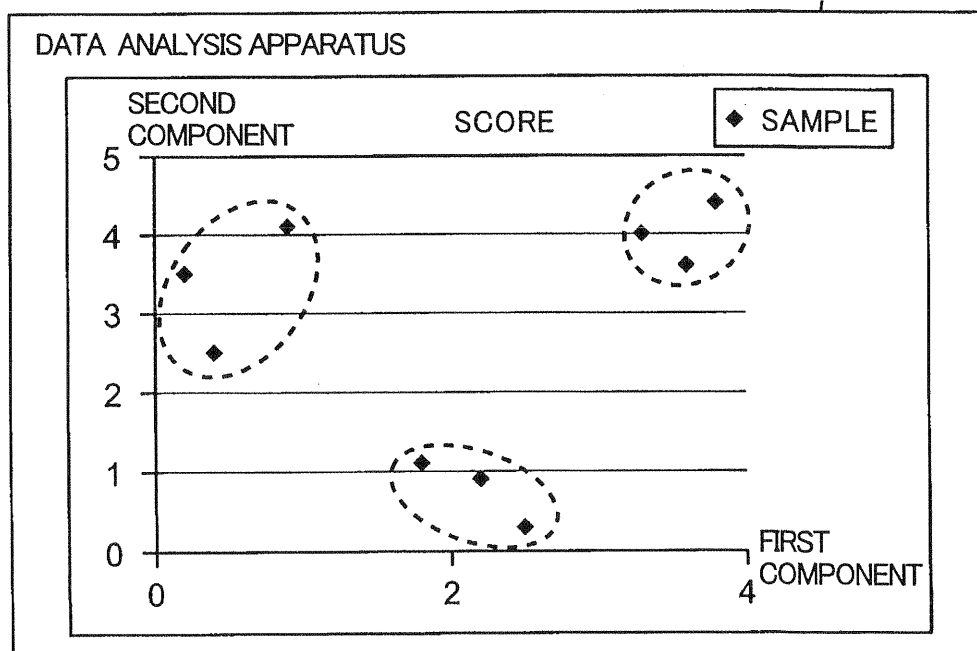


FIG. 2

$$X_{(L)}' \quad X_1^{(L)}$$

METABOLITES OF LIVER	SAMPLE 1	SAMPLE 2	SAMPLE 3	...	SAMPLE 8	SAMPLE 9
1,4-Butanediamine	1.29E-03	1.04E-03	7.40E-04	...	9.25E-04	7.50E-04
1-Methylnicotinamide	7.74E-04	8.25E-04	8.41E-04	...	8.98E-04	6.62E-04
1-Methylhistamine	2.34E-04	2.79E-04	1.90E-04	...	2.14E-04	4.43E-04
2,3-Diaminopropionate	7.61E-04	1.13E-03	7.46E-04	...	1.16E-03	9.13E-04
2,3-Diphosphoglyceric acid	5.43E-03	1.31E-02	4.71E-03	...	6.63E-03	2.29E-02
2-Aminobutyrate	1.51E-02	2.11E-02	1.73E-02	...	2.77E-02	2.00E-02
2'-Deoxyguanosine	3.67E-04	5.28E-04	5.03E-04	...	4.10E-04	3.41E-04
2-Hydroxyisobutyric acid, 2-Hydroxybutyric acid, 3-Hydroxybutyric acid	1.05E-02	1.70E-02	1.46E-02	...	1.55E-02	1.99E-02
2-Hydroxypentanoic acid	9.09E-03	1.31E-02	1.20E-02	...	1.38E-02	1.20E-02
2-Methylserine	5.64E-04	1.61E-03	1.60E-03	...	7.53E-04	1.25E-03
2-Oxoisovaleric acid	7.03E-03	9.64E-03	8.62E-03	...	6.74E-03	7.05E-03
3-Hydroxypropionic acid	6.17E-02	1.05E-01	8.90E-02	...	5.59E-02	8.92E-02
5-Methylthioadenosine	4.81E-04	1.37E-03	8.72E-04	...	7.57E-04	1.29E-03
5-Oxoproline	1.32E-02	1.41E-02	1.29E-02	...	1.62E-02	1.35E-02
6-Phosphogluconic acid	1.14E-02	1.07E-02	1.88E-02	...	6.37E-03	1.85E-02
N,N-Dimethylglycine	1.06E-02	1.37E-02	1.13E-02	...	4.45E-02	7.37E-02
α -Aminoadipate	4.35E-02	4.61E-02	2.97E-02	...	3.94E-02	3.62E-02
Adenine	1.71E-02	2.18E-02	1.92E-02	...	1.42E-02	1.21E-02
Adenosine	1.73E-02	1.87E-02	2.29E-02	...	1.29E-02	9.95E-03
Adenylosuccinic acid	2.49E-02	8.01E-02	5.65E-02	...	3.45E-02	2.05E-02
Adipic acid	2.30E-03	2.39E-03	2.19E-03	...	4.23E-03	2.94E-03
ADP	8.41E-02	1.28E-01	9.96E-02	...	6.70E-02	1.15E-01
ADPribose	1.09E-02	1.75E-02	5.84E-03	...	9.22E-03	4.61E-02
Ala	6.81E-01	1.38E+00	6.51E-01	...	6.25E-01	1.04E+00
Ala-Ala	3.47E-03	2.38E-03	1.80E-03	...	2.19E-03	1.40E-03
Arg	1.10E-02	3.06E-02	1.36E-02	...	6.72E-03	1.25E-02
Argininosuccinic acid	3.82E-03	1.50E-02	7.24E-03	...	3.51E-03	6.78E-03
Asn	2.04E-01	2.36E-01	2.06E-01	...	1.39E-01	1.85E-01
Asp	7.12E-01	1.23E+00	5.87E-01	...	6.58E-01	5.87E-01
ATP	6.92E-03	1.18E-02	1.08E-02	...	4.98E-03	1.33E-02
Benzoic acid	3.46E-03	3.98E-03	3.28E-03	...	3.54E-03	3.84E-03
Betaine	2.19E-01	3.44E-01	2.15E-01	...	9.97E-01	7.04E-01
Betaine aldehyde_H2O	7.30E-03	1.56E-02	3.66E-03	...	5.97E-03	3.86E-03
Butanoic acid	1.66E-03	3.40E-03	2.78E-03		2.98E-03	7.98E-03
Hypoxanthine	7.09E-02	7.39E-02	7.68E-02	4.30E-02	4.44E-02	3.83E-02
Inosine	3.74E-01	3.95E-01	4.17E-01	2.20E-01	2.26E-01	1.97E-01
Urate	1.02E-03	2.29E-03	3.75E-03	7.76E-04	2.64E-02	2.07E-02
CDP-choline	1.27E-02	1.54E-02	1.54E-02			

FIG. 3



METABOLITES OF HEART	SAMPLE 1	SAMPLE 2	SAMPLE 3	...	SAMPLE 8	SAMPLE 9
1,4-Butanediamine	1.47E-02	9.74E-03	8.79E-03	...	8.09E-03	1.06E-02
10-Hydroxydecanoic acid	1.29E-03	3.86E-03	1.21E-03	...	1.45E-03	1.07E-03
1-Methylhistamine	3.83E-04	3.37E-04	1.76E-04	...	2.32E-04	3.81E-04
2,3-Diphosphoglyceric acid	2.19E-03	5.59E-03	2.57E-03	...	3.18E-03	5.70E-03
2-Aminobutyrate	3.71E-03	6.31E-03	5.26E-03	...	6.34E-03	6.53E-03
2-Deoxyglucose 6-phosphate	1.00E-03	1.30E-03	8.35E-04	...	8.31E-04	9.58E-04
2-Hydroxyisobutyric acid, 2-Hydroxybutyric acid, 3-Hydroxybutyric acid	7.71E-03	2.26E-02	5.62E-03	...	1.16E-02	5.69E-03
2-Hydroxypentanoic acid	5.86E-03	1.65E-02	7.72E-03	...	9.08E-03	6.01E-03
3-Guanidinopropionate	3.81E-03	1.77E-03	2.20E-03	...	2.12E-03	4.94E-03
3-Hydroxy-3-methylglutaric acid	4.62E-04	4.68E-04	4.31E-04	...	6.08E-04	4.37E-04
3-Hydroxybutyric acid	1.81E-01	3.66E-01	2.27E-01	...	2.76E-01	2.60E-01
3-Methylhistidine	1.15E-01	8.72E-02	9.40E-02	...	6.56E-02	5.21E-02
3-Phenylpropionic acid	4.73E-03	4.94E-03	3.92E-03	...	2.94E-03	5.35E-03
3-Phosphoglyceric acid	2.81E-03	3.56E-03	3.80E-03	...	2.48E-03	2.31E-03
5-Oxoproline	2.88E-02	2.89E-02	2.81E-02	...	3.08E-02	4.49E-02
6-Hydroxyhexanoic acid	5.49E-03	2.24E-02	6.59E-03	...	6.21E-03	5.66E-03
N,N-Dimethylglycine	1.45E-03	1.64E-03	2.09E-03	...	4.81E-03	5.55E-03
N5-Ethylglutamine	2.36E-03	3.58E-03	4.01E-03	...	2.64E-03	3.96E-03
α -Aminoadipate	4.37E-02	5.76E-02	4.82E-02	...	4.87E-02	6.43E-02
Acetyl CoA	2.68E-03	3.62E-03	6.18E-03	...	5.44E-03	1.14E-02
Acetylcholine	1.59E-03	9.36E-04	2.48E-03	...	5.74E-04	4.96E-04
Adenine	4.47E-02	4.72E-02	4.90E-02	...	5.53E-02	4.76E-02
Adenosine	3.72E-02	5.68E-02	8.48E-01	...	1.45E-01	6.35E-01
Adenylosuccinic acid	2.38E-02	3.67E-02	3.99E-02	...	7.28E-02	5.99E-02
Adipic acid	8.59E-04	8.01E-04	7.25E-04	...	8.02E-04	5.26E-04
ADP	3.42E-01	2.39E-01	3.08E-01	...	2.83E-01	3.27E-01
Ala	3.75E+00	4.50E+00	4.13E+00	...	4.18E+00	4.24E+00
Ala-Ala	2.11E-03	2.16E-03	1.92E-03	...	2.13E-03	1.78E-03
AMP	1.44E+00	1.40E+00	1.57E+00	...	1.49E+00	1.79E+00
Anserine, Homocarnosine	2.22E-01	1.40E-01	2.26E-01	...	2.38E-01	2.52E-01
Anthranilate	1.21E-03	1.51E-03	1.65E-03	...	1.58E-03	2.03E-03
Arg	4.50E-01	5.65E-01	5.97E-01	...	5.37E-01	5.80E-01
Argininosuccinic acid	1.54E-03	2.65E-03	2.39E-03	...	2.96E-03	4.68E-03
Betaine	4.30E-01	8.26E-01	1.73E+00	...	3.30E+00	1.76E+00
Citrulline	1.10E-01	1.66E-01	9.37E-02	...	3.88E-02	4.47E-02
CMP	2.91E-03	3.22E-03	3.08E-03	...	4.05E-03	3.15E-03
CoA	1.68E-02	2.18E-02	2.54E-02	...	2.85E-02	4.06E-02

FIG. 4

 $X_{(B)}'$
 $X_1^{(B)}$

METABOLITES OF BRAIN	SAMPLE 1	SAMPLE 2	SAMPLE 3	...	SAMPLE 8	SAMPLE 9
β -Ala	6.77E-02	7.68E-02	7.73E-02	...	8.57E-02	7.07E-02
Xanthosine	2.70E-03	1.29E-03	1.61E-03	...	1.62E-03	1.06E-03
Xanthine	5.53E-03	5.77E-03	5.65E-03	...	7.02E-03	5.00E-03
Val	3.92E-01	3.76E-01	3.43E-01	...	3.72E-01	3.27E-01
Uridine	1.13E-01	7.50E-02	9.03E-02	...	1.08E-01	6.83E-02
N8-Acetylspermidine	3.15E-04	2.25E-04	2.29E-04	...	3.83E-04	2.72E-04
N6-Acetyllysine	1.45E-03	1.40E-03	1.50E-03	...	1.40E-03	1.15E-03
N6,N6,N6-Trimethyllysine	5.65E-03	5.52E-03	5.52E-03	...	7.27E-03	6.28E-03
N5-Ethylglutamine	7.44E-03	6.35E-03	7.17E-03	...	3.36E-03	3.19E-03
Trp	3.78E-02	3.30E-02	3.19E-02	...	3.34E-02	3.07E-02
Trimethylamine N-oxide	8.04E-04	9.06E-04	4.59E-03	...	1.43E-03	2.21E-03
Threonic acid	7.83E-02	7.59E-02	8.57E-02	...	1.08E-01	6.23E-02
Thr	5.18E-01	5.21E-01	3.87E-01	...	4.03E-01	4.83E-01
Taurine	3.69E-01	4.61E-01	3.51E-01	...	3.97E-01	5.37E-01
Succinic acid	2.68E-01	2.86E-01	1.23E-01	...	2.38E-01	2.54E-01
Spermine	1.96E-03	1.73E-03	7.42E-04	...	1.62E-03	7.47E-04
Spermidine	1.78E-02	1.88E-02	1.26E-02	...	1.72E-02	1.81E-02
S-Lactoylglutathione	8.18E-04	1.25E-03	1.02E-03	...	1.01E-03	1.26E-03
Serotonin	1.34E-03	1.79E-03	1.44E-03	...	2.55E-03	1.41E-03
Ser	1.23E+00	1.41E+00	1.39E+00	...	1.48E+00	1.11E+00
Sedoheptulose 7-phosphate	6.72E-03	5.68E-03	4.36E-03	...	5.67E-03	6.39E-03
Sarcosine	9.78E-04	1.19E-03	1.78E-03	...	1.60E-03	1.39E-03
SAM	1.53E-02	1.66E-02	1.49E-02	...	2.01E-02	1.99E-02
SAH	5.30E-03	5.23E-03	4.55E-03	...	5.29E-03	5.77E-03
CMP	5.85E-03	8.74E-03	7.15E-03	...	6.82E-03	4.10E-03
Citrulline	1.58E-01	1.38E-01	1.34E-01	...	8.80E-02	6.39E-02
Citrate	2.64E-01	1.49E-01	4.11E-01	...	2.79E-01	1.30E-01
Pyridoxamine 5'-phosphate	9.82E-03	1.11E-02	9.21E-03	...	1.17E-02	8.32E-03
Prostaglandin F2a	3.87E-03	2.41E-03	4.48E-03	...	4.88E-03	2.17E-03
Propionic acid	3.16E-03	4.05E-03	3.63E-03	...	3.88E-03	4.21E-03
Pro	3.11E-01	2.73E-01	2.46E-01	...	3.34E-01	2.82E-01
Pipecolate	1.02E-03	2.09E-03	3.01E-03	...	2.42E-03	5.92E-03
Phosphorylcholine	5.32E-01	5.62E-01	5.99E-01	...	6.24E-01	5.37E-01
Phe	2.26E-01	1.99E-01	2.04E-01	...	2.03E-01	1.67E-01
Pelargonic acid	5.71E-03		5.73E-03	...	5.59E-03	7.82E-03
Pantothenic acid	2.91E-02	3.40E-02	2.54E-02	...	3.76E-02	2.66E-02
Ornithine	3.35E-02	3.33E-02	2.32E-02	...	3.29E-02	3.94E-02
O-Acetylcarnitine	3.36E-02	4.00E-02	6.99E-02	...	6.22E-02	9.19E-02
Nicotinamide,						

FIG. 5

$$X_{(P)}' \quad X_1^{(P)}$$

METABOLITES OF PLASMA	SAMPLE 1	SAMPLE 2	SAMPLE 3	...	SAMPLE 8	SAMPLE 9
2,3-Diphosphoglyceric acid	1.38E-02	5.99E-03	5.97E-03	...	8.62E-03	9.19E-03
2-Aminobutyrate	6.35E-02	7.13E-02	5.20E-02	...	6.82E-02	7.05E-02
2-Hydroxyisobutyric acid, 2-Hydroxybutyric acid, 3-Hydroxybutyric acid	1.68E-01	1.69E-01	1.30E-01	...	1.58E-01	1.34E-01
2-Hydroxypentanoic acid	8.26E-02	7.54E-02	9.71E-02	...	7.62E-02	1.14E-01
2-Oxoglutaric acid	9.80E-02	5.86E-02	5.77E-02	...	6.68E-02	9.12E-02
2-Oxoisopentanoic acid	7.09E-02	6.82E-02	5.83E-02	...	6.55E-02	7.70E-02
3-Hydroxybutyric acid	1.30E+00	1.04E+00	5.66E-01	...	1.26E+00	6.85E-01
3-Methylhistidine	2.91E-01	4.68E-01	3.83E-01	...	3.06E-01	2.63E-01
3-Phenylpropionic acid	2.87E-02	4.42E-02	2.40E-02	...	3.24E-02	4.72E-02
3-Phosphoglyceric acid	8.11E-03	1.05E-02	6.90E-03	...	8.31E-03	6.32E-03
4-Acetylbutyric acid	1.99E-02	2.07E-02	1.73E-02	...	1.76E-02	1.97E-02
4-Methyl-2-oxopentanoic acid	3.24E-01	3.54E-01	2.55E-01	...	3.33E-01	2.87E-01
4-Oxopentanoic acid	1.59E-02	2.07E-02	1.49E-02	...	1.24E-02	1.45E-02
4-Pyridoxic acid	3.48E-03	3.49E-03	3.58E-03	...	5.02E-03	2.92E-03
5-Oxoproline	7.56E-02	8.16E-02	8.19E-02	...	8.13E-02	8.62E-02
6-Hydroxyhexanoic acid	9.06E-03	1.08E-02	9.22E-03	...	1.08E-02	1.22E-02
N,N-Dimethylglycine	6.26E-02	1.54E-02	1.94E-02	...	6.05E-02	7.20E-02
N5-Ethylglutamine	2.18E-02	3.72E-02	3.52E-02	...	1.51E-02	1.93E-02
N6,N6,N6-Trimethyllysine	2.20E-02	3.18E-02	2.44E-02	...	2.22E-02	3.20E-02
Anserine, Homocarnosine	8.74E-03	7.70E-03	7.36E-03	...	8.49E-03	7.23E-03
Anthranilate	1.72E-02	2.58E-02	1.83E-02	...	1.28E-02	1.93E-02
Arg	1.96E+00	2.51E+00	1.79E+00	...	1.93E+00	2.16E+00
Argininosuccinic acid	3.85E-03	4.47E-03	4.85E-03	...	2.40E-03	3.67E-03
Asn	3.09E-01	4.45E-01	2.69E-01	...	3.43E-01	4.10E-01
Asp	5.97E-02	5.98E-02	6.64E-02	...	6.75E-02	3.83E-02
Azelaic acid	5.66E-03	5.34E-03	5.35E-03	...	4.47E-03	6.87E-03
Benzoic acid	2.51E-02	2.57E-02	2.50E-02	...	2.55E-02	2.82E-02
Betaine	6.31E+00	2.79E+00	2.39E+00	...	5.18E+00	4.67E+00
Butanoic acid	4.77E-02	1.12E-01	4.27E-02	...	3.32E-02	1.06E-01
Camitine	5.65E-01	5.69E-01	5.72E-01	...	5.13E-01	5.81E-01
Camosine	3.17E-02	2.18E-02	1.43E-02	...	2.33E-02	4.00E-02
Choline	4.32E-01	4.15E-01	3.84E-01	...	4.33E-01	3.85E-01
cis-Aconitic acid	1.01E-01	7.20E-02	6.79E-02	...	8.72E-02	1.07E-01
Citramalic acid	9.10E-03	5.54E-03	4.79E-03	...	4.82E-03	9.53E-03
Citrate	1.75E+00	1.75E+00	1.65E+00	...	1.66E+00	2.20E+00
Citrulline	7.52E-01	1.20E+00	8.43E-01	...	5.96E-01	7.22E-01
Creatine	6.23E-01	4.90E-01	4.59E-01	...	2.67E-01	8.01E-01
Creatinine	9.03E-01	1.05E+00	9.61E-01	...	8.97E-01	1.01E+00
Cys	4.06E-01	4.06E-01	4.06E-01	...	4.06E-01	4.06E-01

FIG. 6

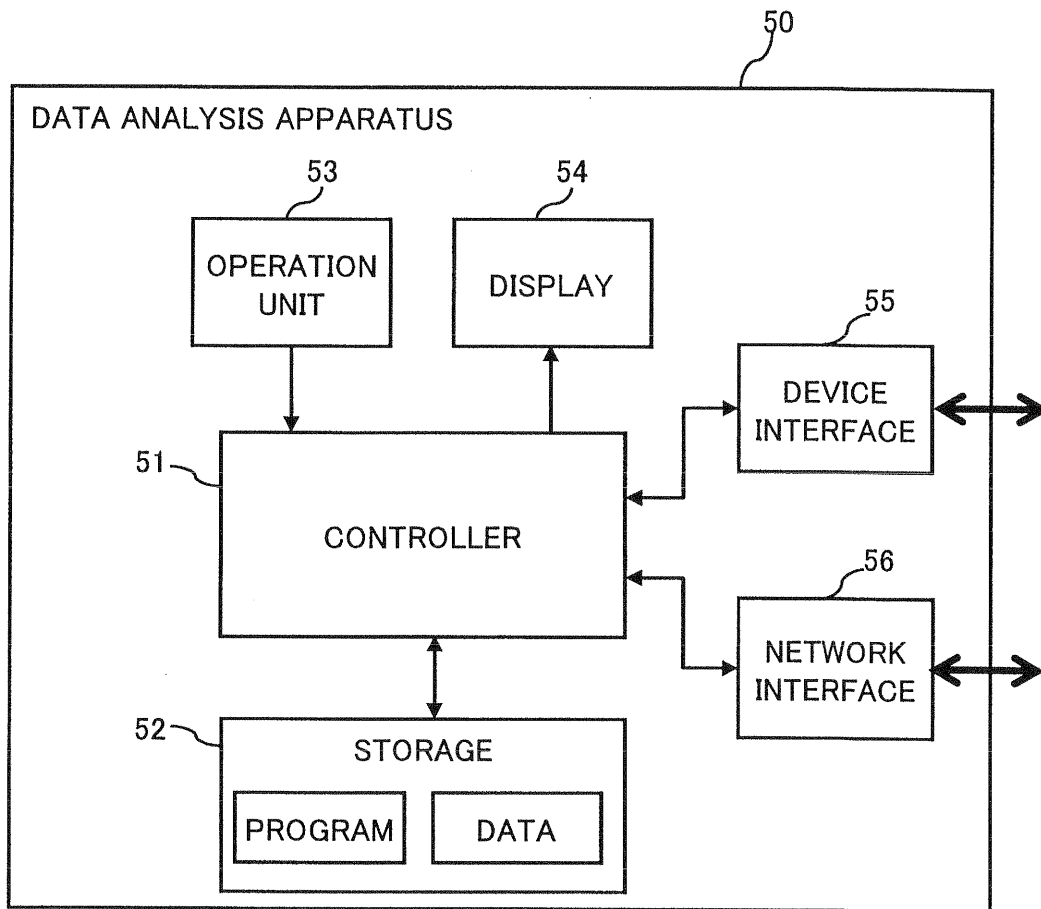


FIG. 7

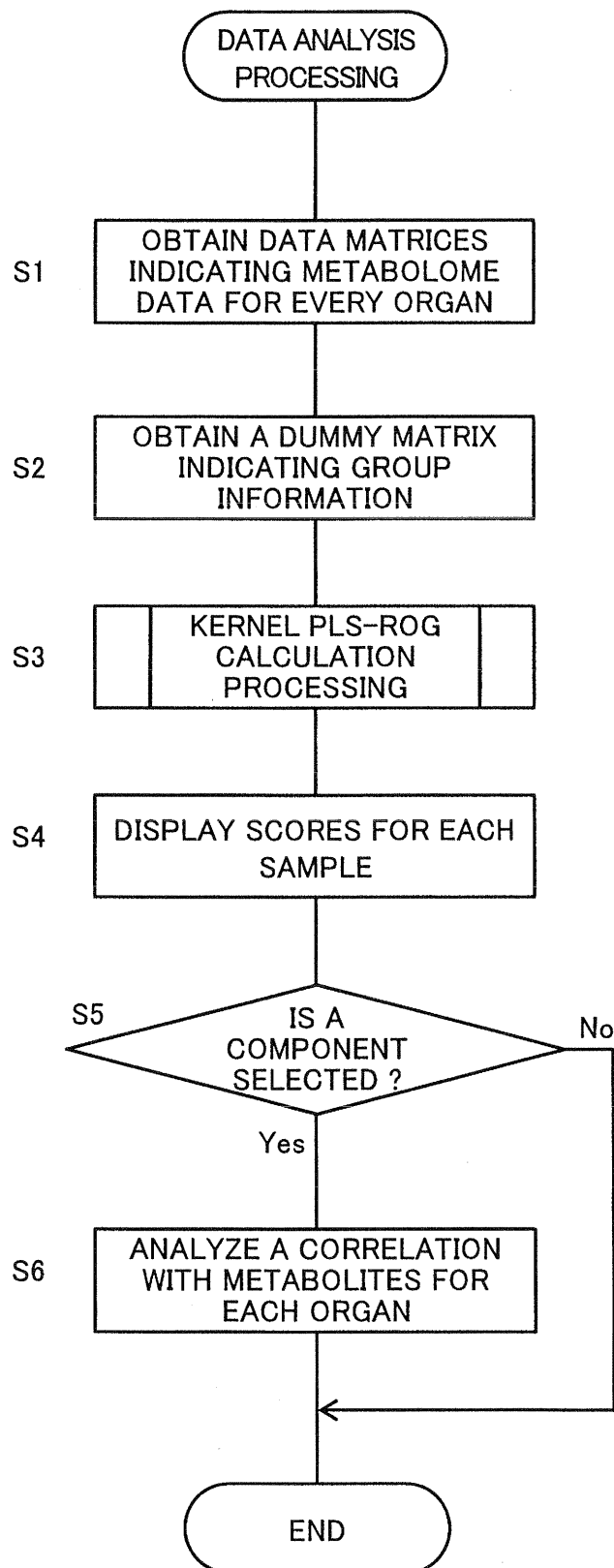


FIG. 8A

$$\mathbf{X}_{(L)} = \begin{bmatrix} \mathbf{x}_1^{(L)} \\ \mathbf{x}_2^{(L)} \\ \vdots \\ \mathbf{x}_9^{(L)} \end{bmatrix} \quad \left. \begin{array}{c} \text{METABOLITES} \\ \text{SAMPLE NUMBER} \end{array} \right\}$$

FIG. 8B

$$\mathbf{Y} = \begin{bmatrix} 1 & 0 & 0 \\ 1 & 0 & 0 \\ 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 1 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \\ 0 & 0 & 1 \\ 0 & 0 & 1 \end{bmatrix} \quad \left. \begin{array}{c} \text{GROUPS} \\ \text{SAMPLE NUMBER} \end{array} \right\}$$

FIG. 8C

$$\mathbf{K}_{(L)} = \begin{bmatrix} \mathbf{x}_1^{(L)} \mathbf{x}_1^{(L)} & \mathbf{x}_1^{(L)} \mathbf{x}_2^{(L)} & \cdots & \mathbf{x}_1^{(L)} \mathbf{x}_9^{(L)} \\ \mathbf{x}_2^{(L)} \mathbf{x}_1^{(L)} & \mathbf{x}_2^{(L)} \mathbf{x}_2^{(L)} & & \vdots \\ \vdots & & \ddots & \\ \mathbf{x}_9^{(L)} \mathbf{x}_1^{(L)} & \cdots & & \mathbf{x}_9^{(L)} \mathbf{x}_9^{(L)} \end{bmatrix} \quad \left. \begin{array}{c} \text{SAMPLE NUMBER} \\ \text{SAMPLE NUMBER} \end{array} \right\}$$

FIG. 8D

$$\mathbf{K} = \frac{1}{4} \mathbf{K}_{(L)} + \frac{1}{4} \mathbf{K}_{(H)} + \frac{1}{4} \mathbf{K}_{(B)} + \frac{1}{4} \mathbf{K}_{(P)}$$

FIG. 8E

$$\mathbf{P} = \begin{bmatrix} 1/3 & 1/3 & 1/3 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1/3 & 1/3 & 1/3 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1/3 & 1/3 & 1/3 \end{bmatrix} \quad \left. \begin{array}{c} \text{SAMPLE NUMBER} \\ \text{GROUPS} \end{array} \right\}$$

FIG. 8F

$$\mathbf{D} = \begin{bmatrix} -1 & 1 & 0 \\ 0 & -1 & 1 \end{bmatrix} \quad \left. \begin{array}{c} \text{GROUPS} \\ \text{GROUPS} - 1 \end{array} \right\}$$

FIG. 9

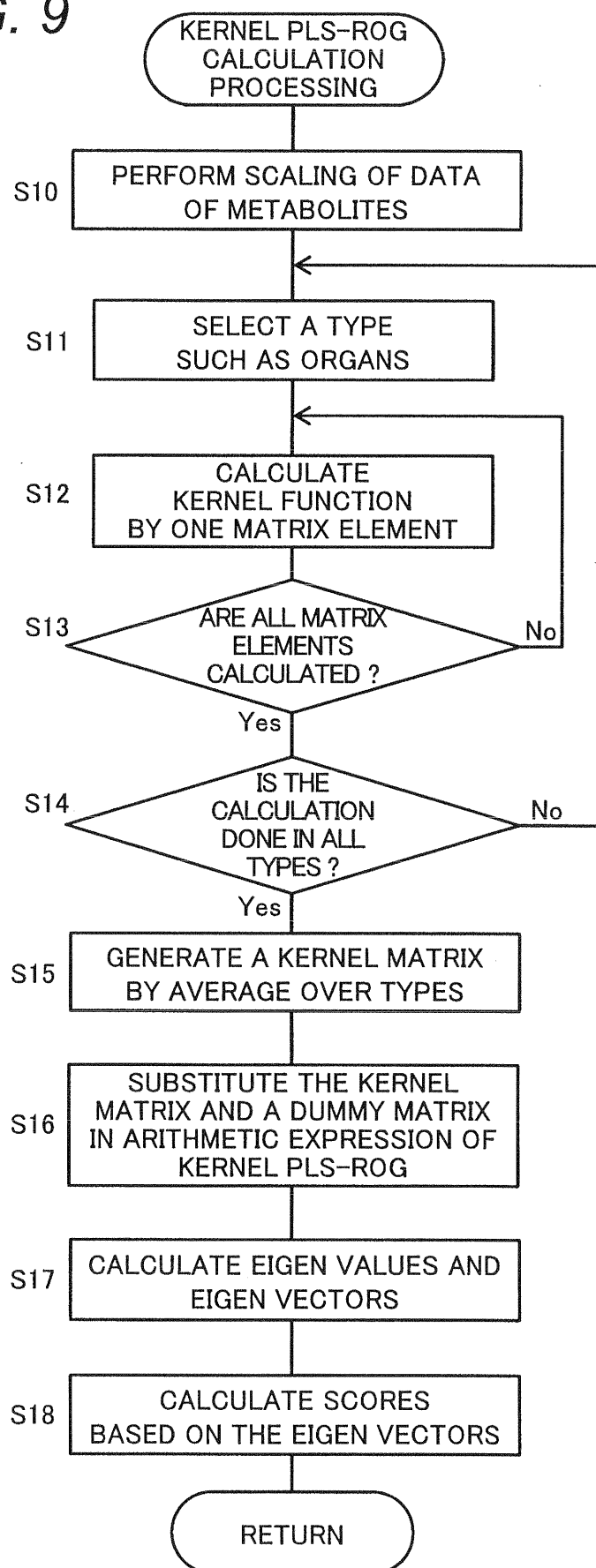


FIG. 10A

α_x	FIRST EIGEN VECTOR	SECOND EIGEN VECTOR
SAMPLE 1	-0.03315147	0.004524849
SAMPLE 2	-0.03315147	0.004524849
SAMPLE 3	-0.03315147	0.004524849
SAMPLE 4	0.00703693	-0.031475913
SAMPLE 5	0.00703693	-0.031475913
SAMPLE 6	0.00703693	-0.031475913
SAMPLE 7	0.02611787	0.026941463
SAMPLE 8	0.02611787	0.026941463
SAMPLE 9	0.02611787	0.026941463

FIG. 10B

w_y	FIRST EIGEN VECTOR	SECOND EIGEN VECTOR
FIRST GROUP (WILD RABBITS)	-0.7550584	-0.1149792
SECOND GROUP (WHHL RABBITS; WITH DOSING)	0.1352623	0.561282
THIRD GROUP (WHHL RABBITS; WITHOUT DOSING)	0.6197961	-0.4463028

FIG. 10C

t	FIRST COMPONENT	SECOND COMPONENT
SAMPLE 1	-4.866	1.536
SAMPLE 2	-8.863	3.192
SAMPLE 3	-5.521	1.559
SAMPLE 4	3.766	-7.299
SAMPLE 5	1.374	-6.703
SAMPLE 6	2.246	-5.530
SAMPLE 7	3.656	3.664
SAMPLE 8	4.233	3.389
SAMPLE 9	3.975	6.191

FIG. 11A

La

METABOLITES OF LIVER	CORRELATION COEFFICIENT	p-VALUE
Betaine	0.666	0.050
N,N-Dimethylglycine	0.712	0.032
Urate	0.594	0.091
Hypoxanthine	-0.849	0.004
Inosine	-0.833	0.005
Adenosine	-0.708	0.033
Adenine	-0.670	0.048
⋮	⋮	⋮

FIG. 11B

Lb

METABOLITES OF HEART	CORRELATION COEFFICIENT	p-VALUE
Betaine	0.758	0.018
N,N-Dimethylglycine	0.754	0.019
Citrulline	-0.925	0.000
⋮	⋮	⋮

FIG. 11C

Lc

METABOLITES OF BRAIN	CORRELATION COEFFICIENT	p-VALUE
N5-Ethylglutamine	-0.723	0.028
Citrulline	-0.804	0.009
⋮	⋮	⋮

FIG. 11D

Ld

METABOLITES OF PLASMA	CORRELATION COEFFICIENT	p-VALUE
N5-Ethylglutamine	-0.670	0.048
⋮	⋮	⋮

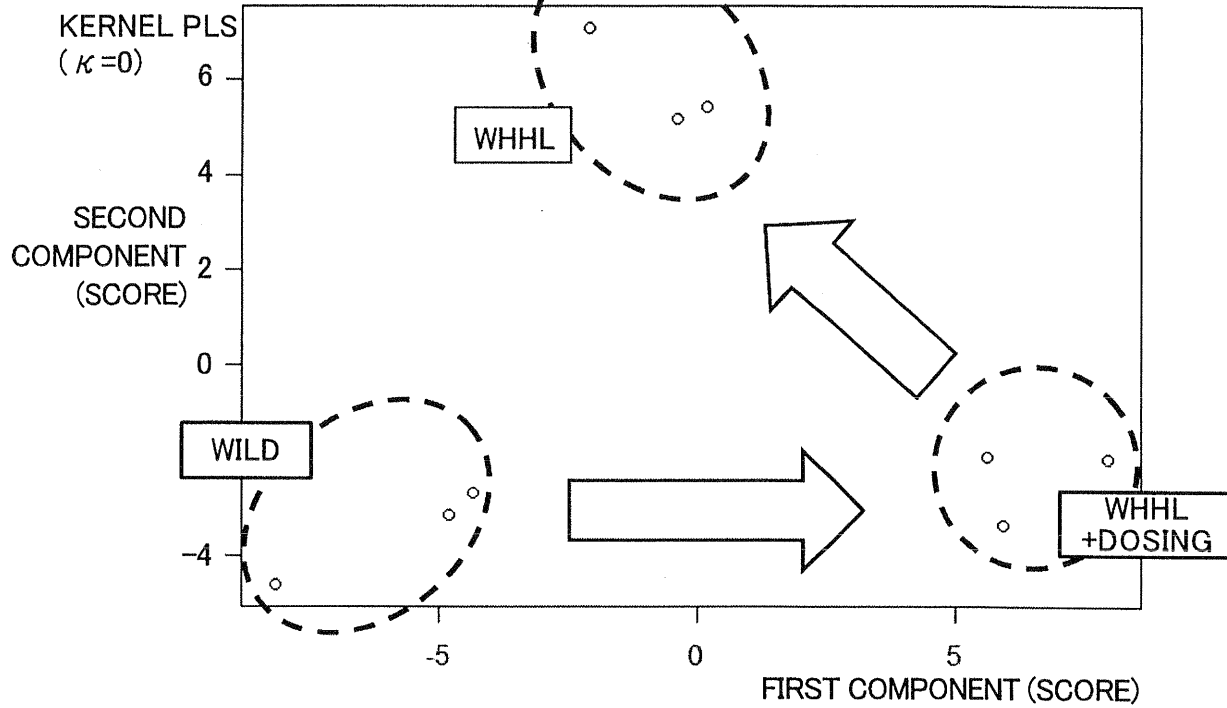
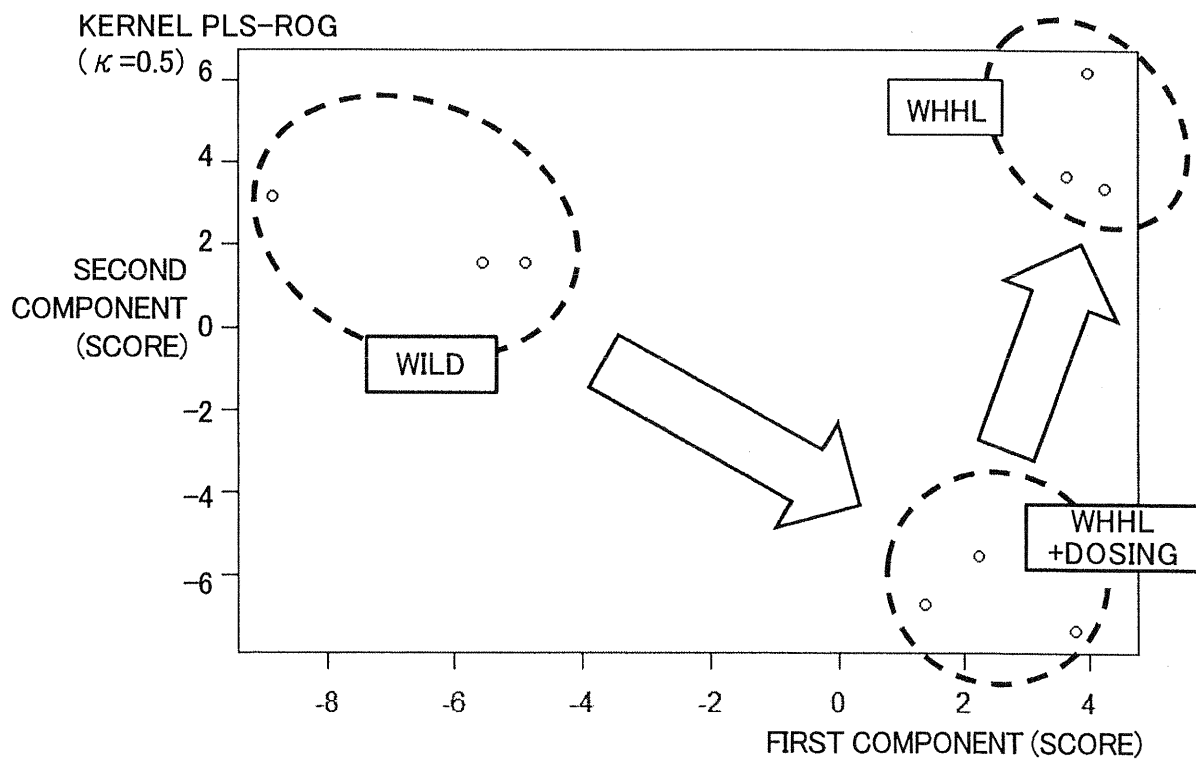
FIG. 12A**FIG. 12B**

FIG. 13A

LIVER	KERNEL PLS			KERNEL PLS-ROG		
	CORRELATION COEFFICIENT	p-VALUE		CORRELATION COEFFICIENT	p-VALUE	
Betaine	0.149	0.702		0.666	0.050	*
N,N-Dimethylglycine	0.158	0.684		0.712	0.032	*
Urate	0.060	0.878		0.594	0.091	
Hypoxanthine	-0.392	0.297		-0.849	0.004	*
Inosine	-0.371	0.326		-0.833	0.005	*
Adenosine	-0.243	0.529		-0.708	0.033	*
Adenine	-0.451	0.223		-0.670	0.048	*

*: p<0.05

FIG. 13B

HEART	KERNEL PLS			KERNEL PLS-ROG		
	CORRELATION COEFFICIENT	p-VALUE		CORRELATION COEFFICIENT	p-VALUE	
Betaine	0.423	0.256		0.758	0.018	*
N,N-Dimethylglycine	0.186	0.632		0.754	0.019	*
Citrulline	-0.740	0.023	*	-0.925	0.000	*

*: p<0.05

FIG. 13C

BRAIN	KERNEL PLS			KERNEL PLS-ROG		
	CORRELATION COEFFICIENT	p-VALUE		CORRELATION COEFFICIENT	p-VALUE	
N5-Ethylglutamine	-0.270	0.483		-0.723	0.028	*
Citrulline	-0.470	0.202		-0.804	0.009	*

*: p<0.05

FIG. 13D

PLASMA	KERNEL PLS			KERNEL PLS-ROG		
	CORRELATION COEFFICIENT	p-VALUE		CORRELATION COEFFICIENT	p-VALUE	
N5-Ethylglutamine	-0.495	0.176		-0.670	0.048	*

*: p<0.05

FIG. 13E

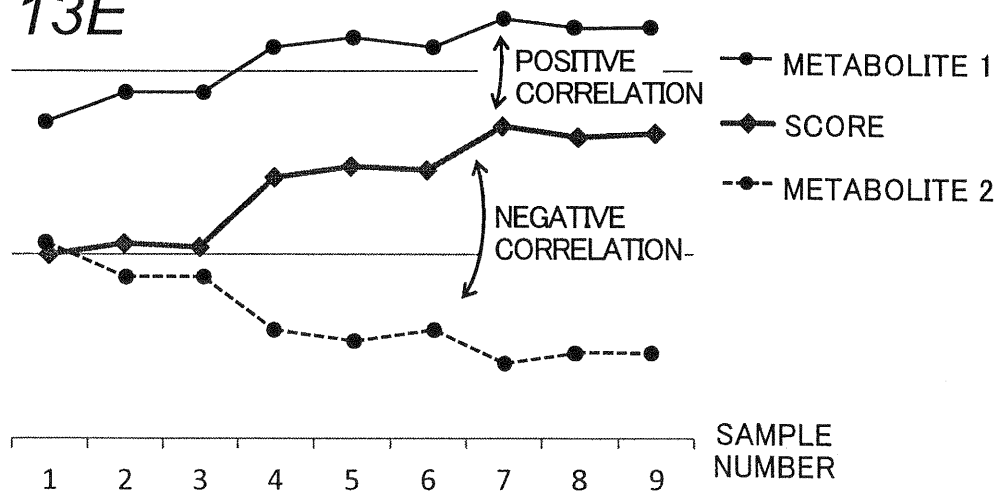


FIG. 14A

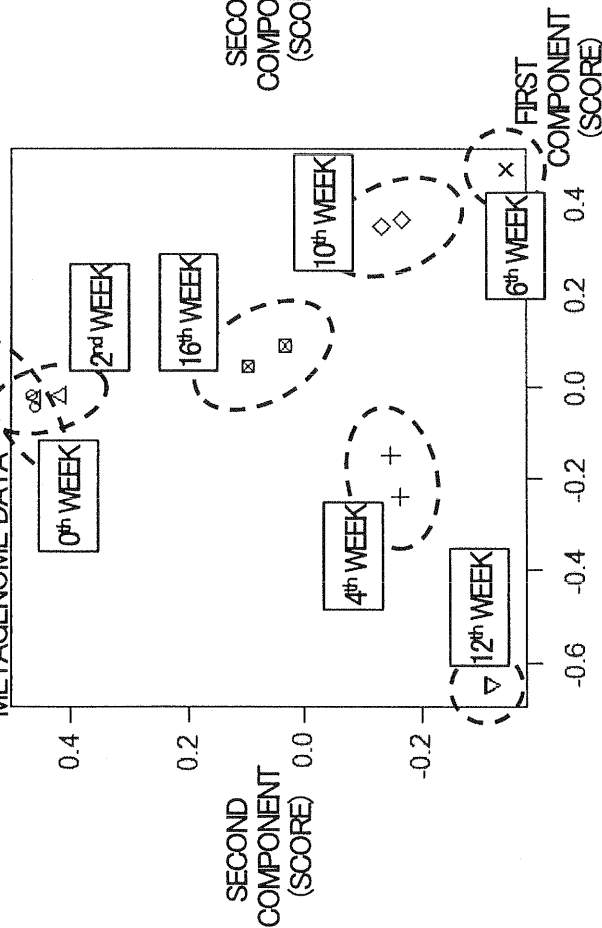
KERNEL PLS:
METAGENOME DATA

FIG. 14B

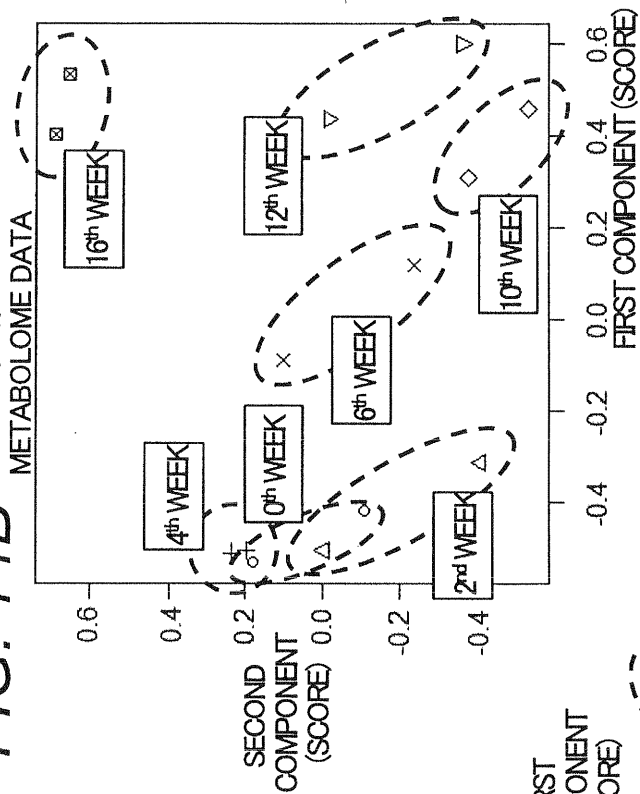
KERNEL PLS:
METABOLOME DATA

FIG. 14C

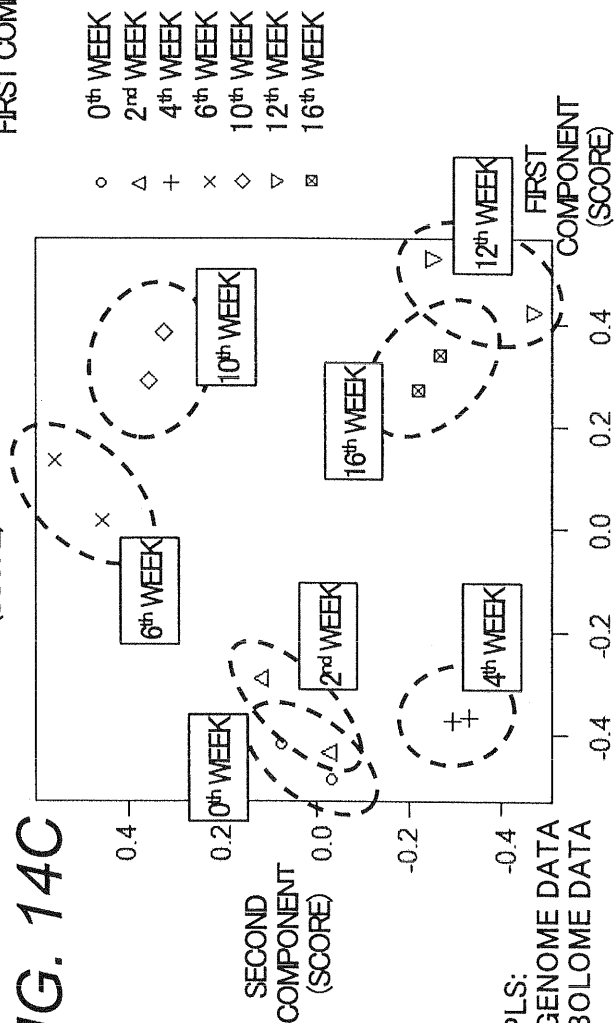
KERNEL PLS:
METAGENOME DATA
+ METABOLOME DATA

FIG. 15A

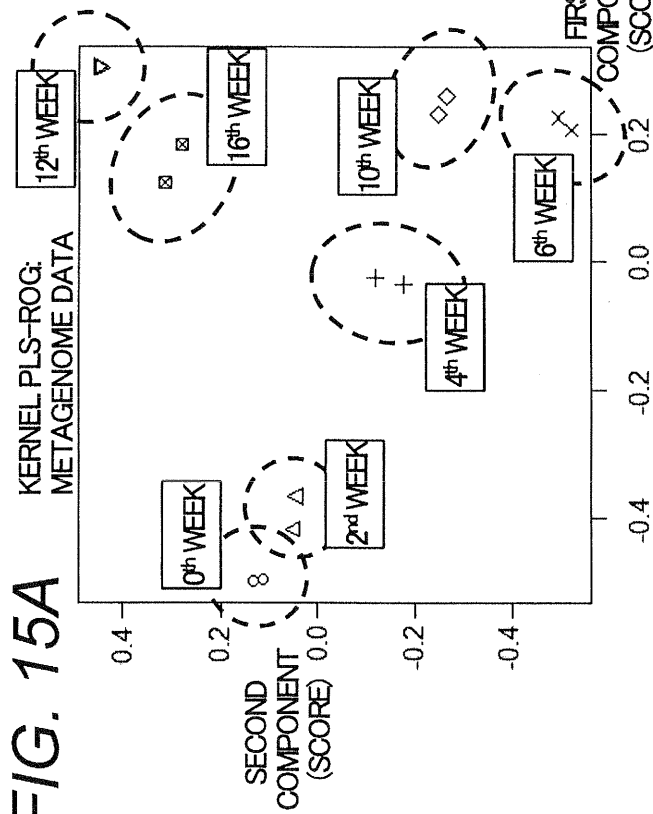


FIG. 15B

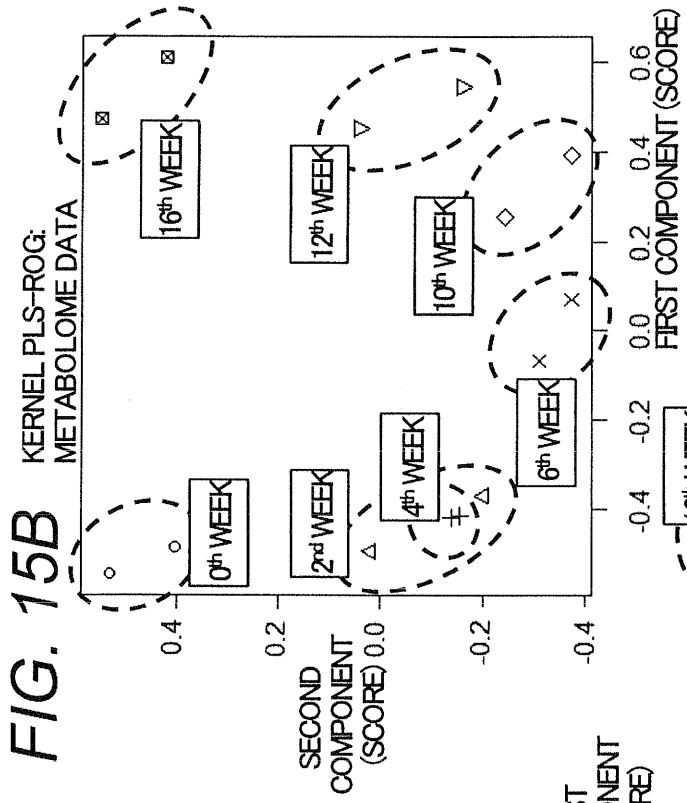


FIG. 15C

