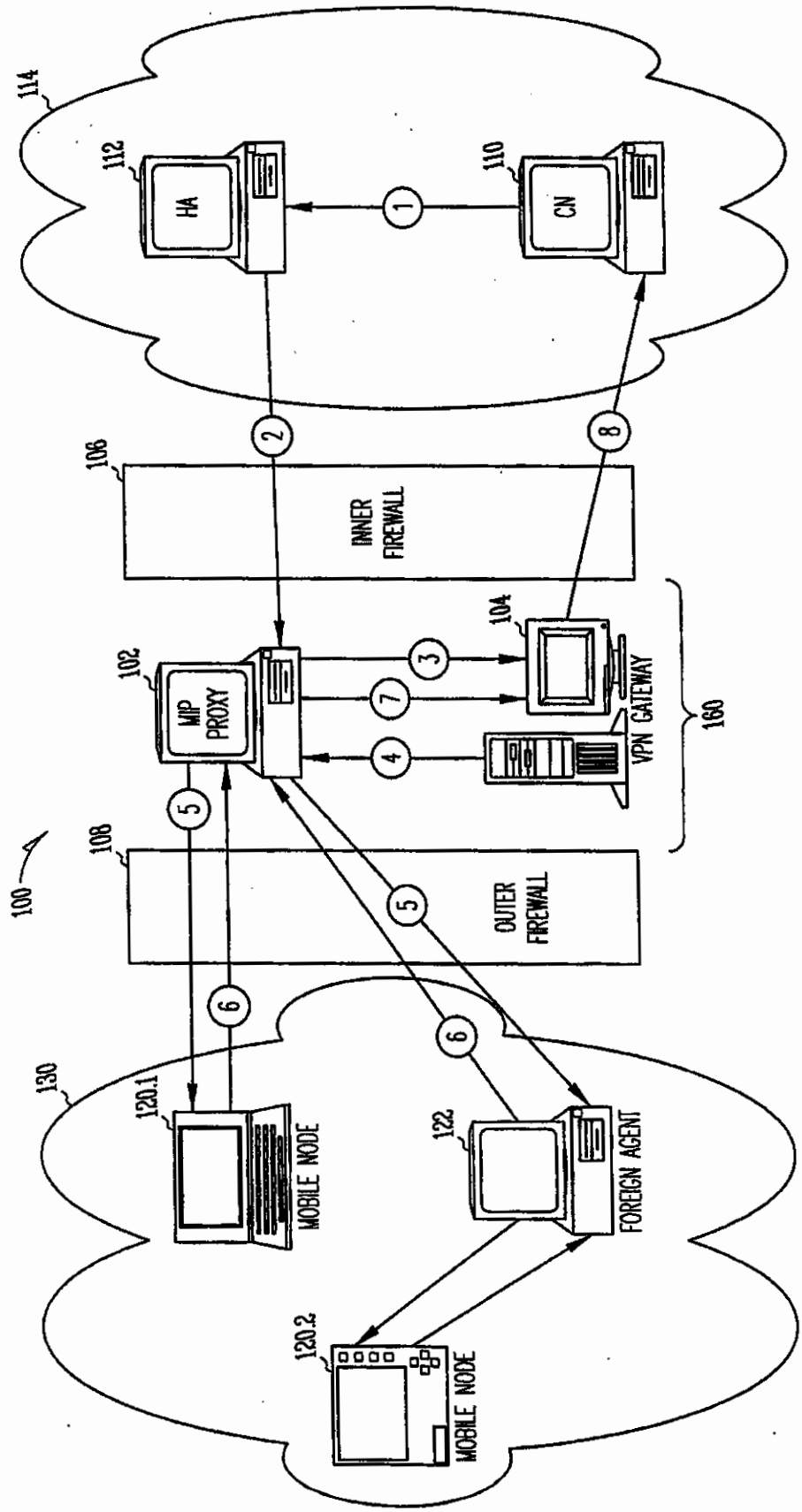

114
112
HA
110
CN
1
2
8
106
INNER FIREWALL
104
102
MIP PROXY
3
7
4
VPN GATEWAY
160
5
108
OUTER FIREWALL
100
5
6
6
130
120.1
MOBILE NODE
122
FOREIGN AGENT
120.2
MOBILE NODE

Fig. 1A

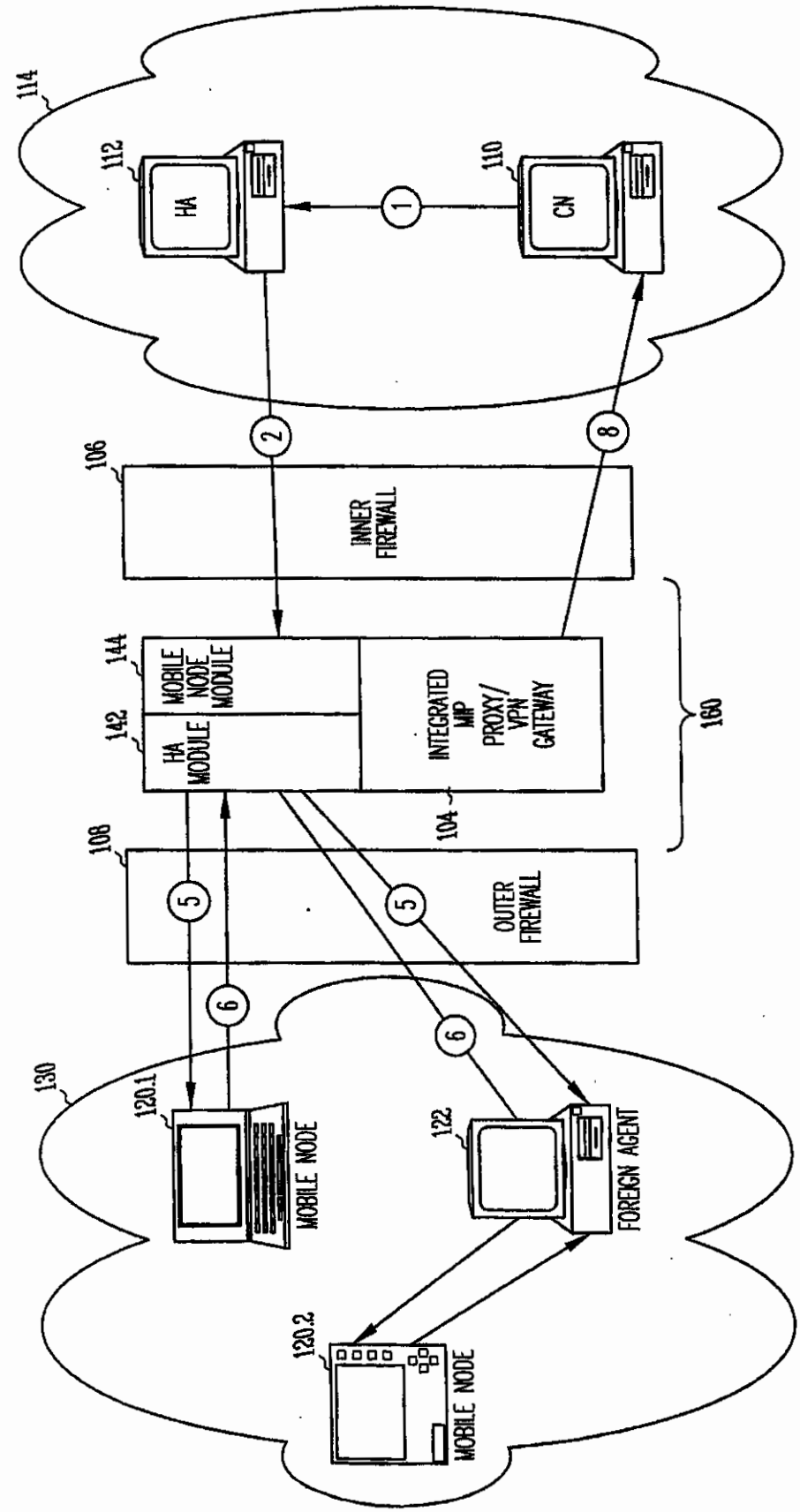

114
112
HA
110
CN
1
2
8
106
INNER FIREWALL
144
MOBILE NODE MODULE
142
HA MODULE
INTEGRATED MIP PROXY/ VPN GATEWAY
160
104
108
OUTER FIREWALL
5
5
6
6
130
120.1
MOBILE NODE
122
FOREIGN AGENT
120.2
MOBILE NODE

Fig. 1B

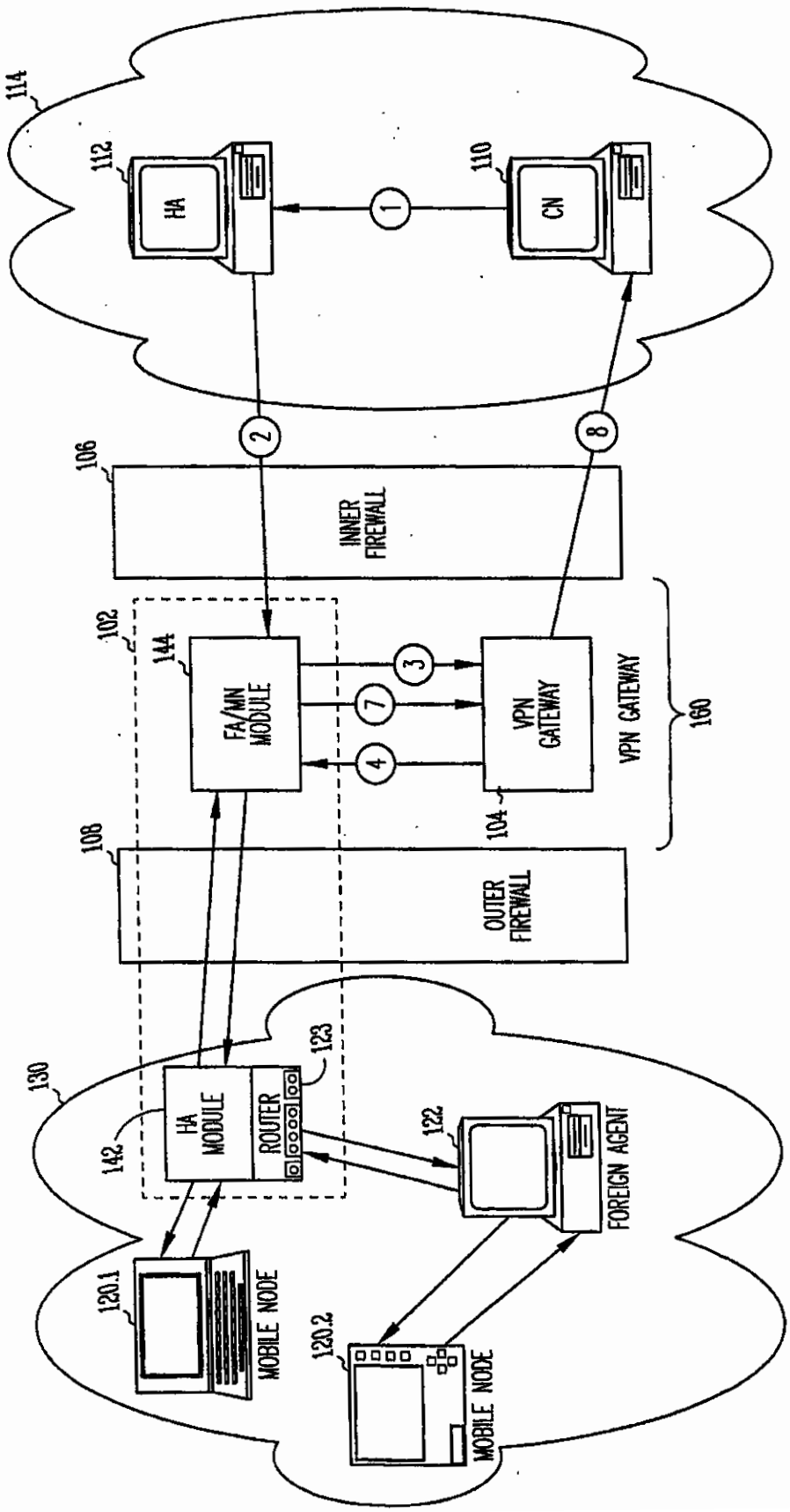

114
112
HA
110
CN
1
2
8
106
INNER FIREWALL
102
144
FA/MN MODULE
3
7
4
VPN GATEWAY
104
VPN GATEWAY
160
108
OUTER FIREWALL
130
123
142
HA MODULE
ROUTER
122
FOREIGN AGENT
120.1
MOBILE NODE
120.2
MOBILE NODE

Fig. 1C

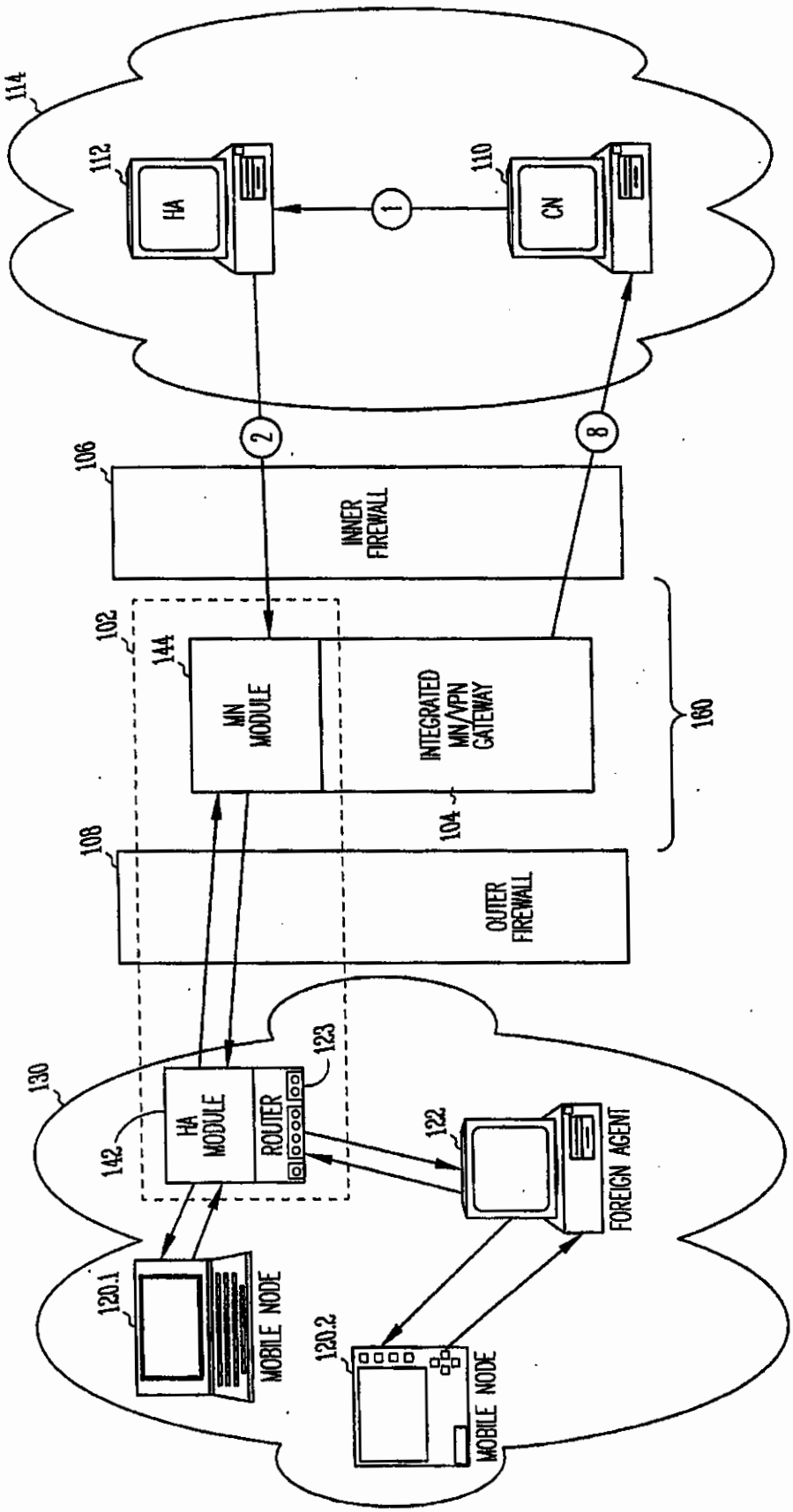

114
112
HA
1
110
CN
2
8
106
INNER FIREWALL
102
144
MN MODULE
INTEGRATED MN/VPN GATEWAY
104
160
108
OUTER FIREWALL
130
123
142
HA MODULE
ROUTER
122
FOREIGN AGENT
120.1
MOBILE NODE
120.2
MOBILE NODE

Fig. 1D

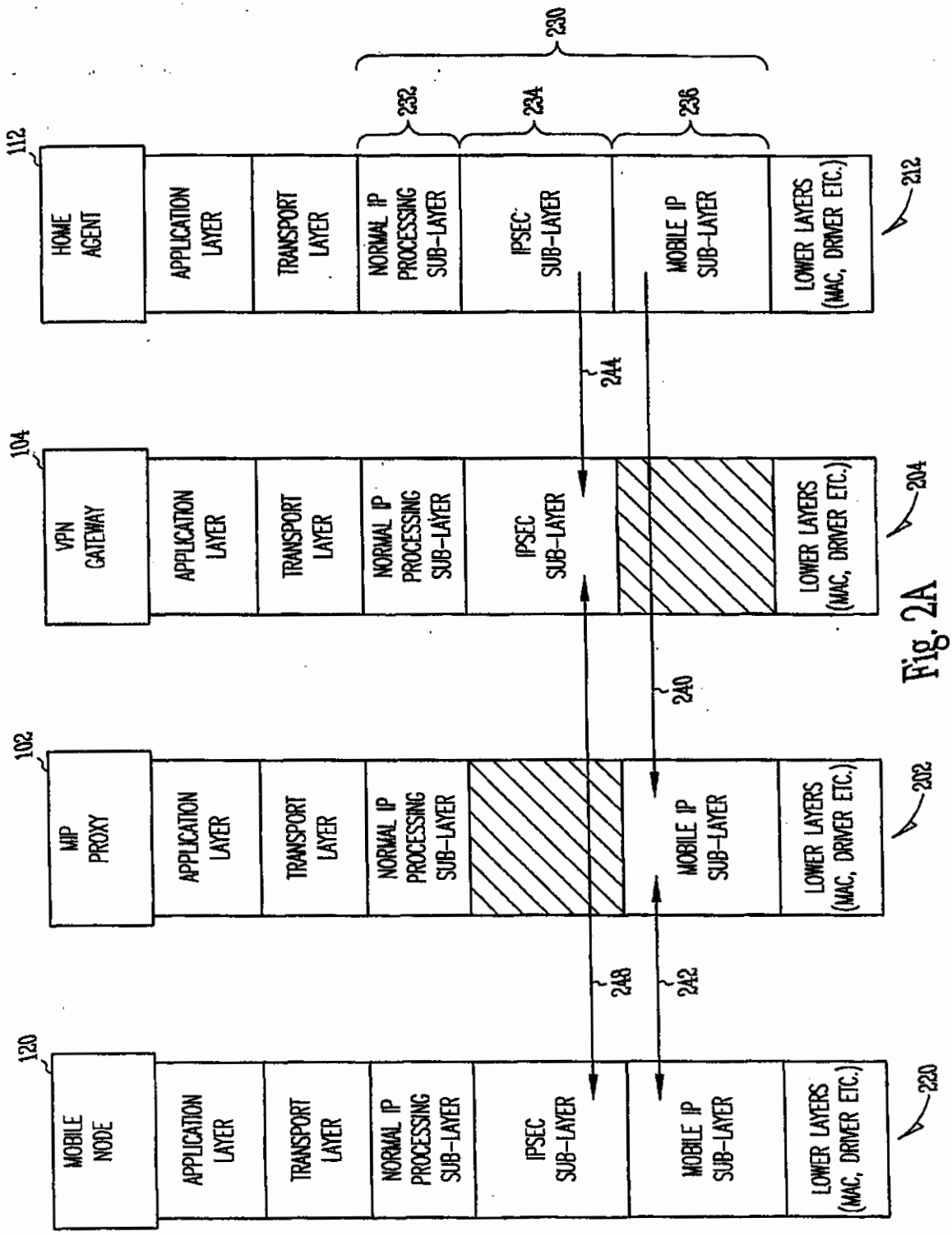

230
232
234
236
112
HOME AGENT
APPLICATION LAYER
TRANSPORT LAYER
NORMAL IP PROCESSING SUB-LAYER
IPSEC SUB-LAYER
MOBILE IP SUB-LAYER
LOWER LAYERS (MAC, DRIVER ETC.)
212
244
104
VPN GATEWAY
APPLICATION LAYER
TRANSPORT LAYER
NORMAL IP PROCESSING SUB-LAYER
IPSEC SUB-LAYER
LOWER LAYERS (MAC, DRIVER ETC.)
204
240
102
MIP PROXY
APPLICATION LAYER
TRANSPORT LAYER
NORMAL IP PROCESSING SUB-LAYER
MOBILE IP SUB-LAYER
LOWER LAYERS (MAC, DRIVER ETC.)
202
248
242
120
MOBILE NODE
APPLICATION LAYER
TRANSPORT LAYER
NORMAL IP PROCESSING SUB-LAYER
IPSEC SUB-LAYER
MOBILE IP SUB-LAYER
LOWER LAYERS (MAC, DRIVER ETC.)
220

Fig. 2A

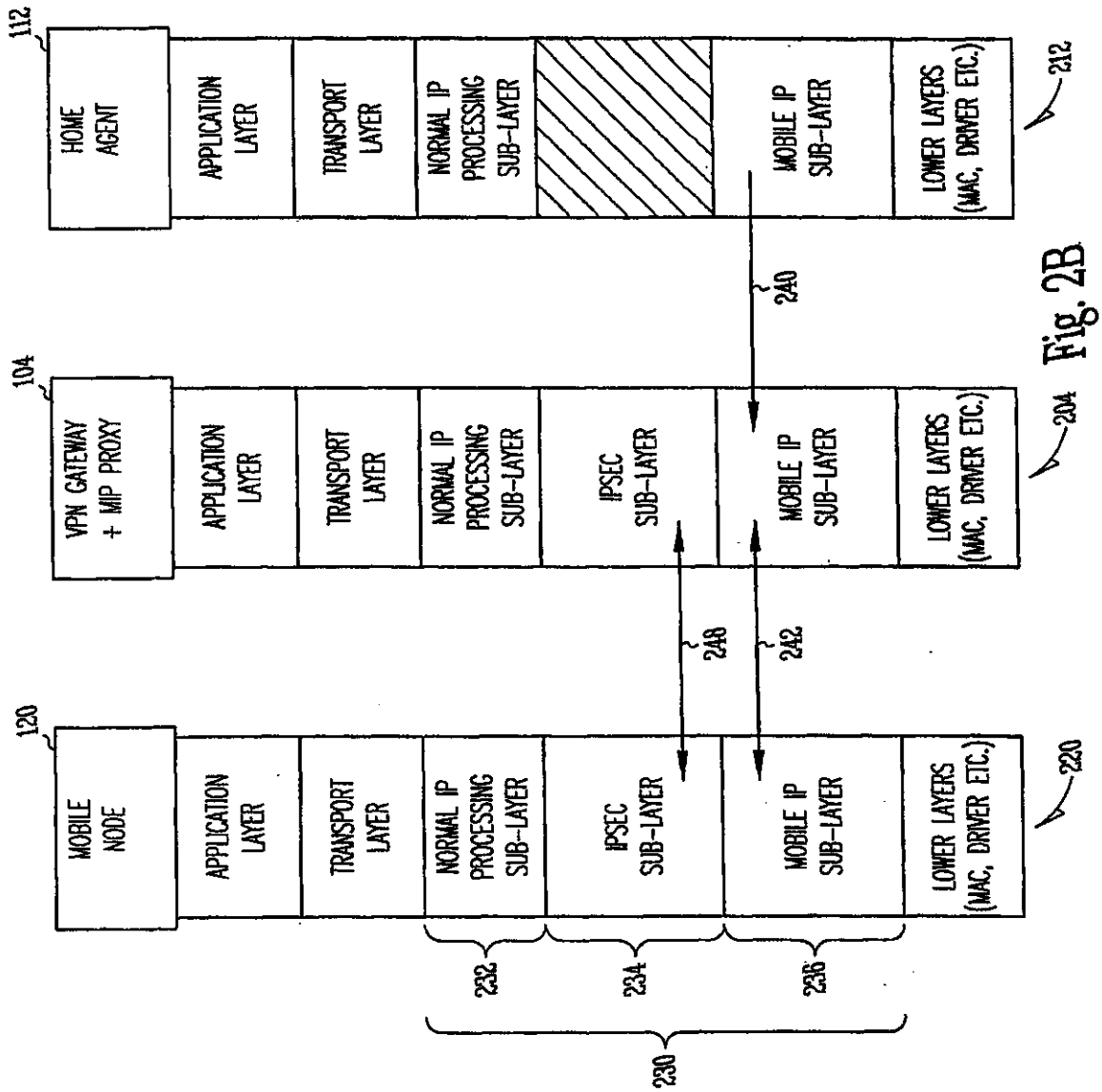

112
HOME AGENT
APPLICATION LAYER
TRANSPORT LAYER
NORMAL IP PROCESSING SUB-LAYER
MOBILE IP SUB-LAYER
LOWER LAYERS (MAC, DRIVER ETC.)
212
240
104
VPN GATEWAY + MIP PROXY
APPLICATION LAYER
TRANSPORT LAYER
NORMAL IP PROCESSING SUB-LAYER
IPSEC SUB-LAYER
MOBILE IP SUB-LAYER
LOWER LAYERS (MAC, DRIVER ETC.)
204
248
242
120
MOBILE NODE
APPLICATION LAYER
TRANSPORT LAYER
NORMAL IP PROCESSING SUB-LAYER
IPSEC SUB-LAYER
MOBILE IP SUB-LAYER
LOWER LAYERS (MAC, DRIVER ETC.)
220
232
234
236
230

Fig. 2B

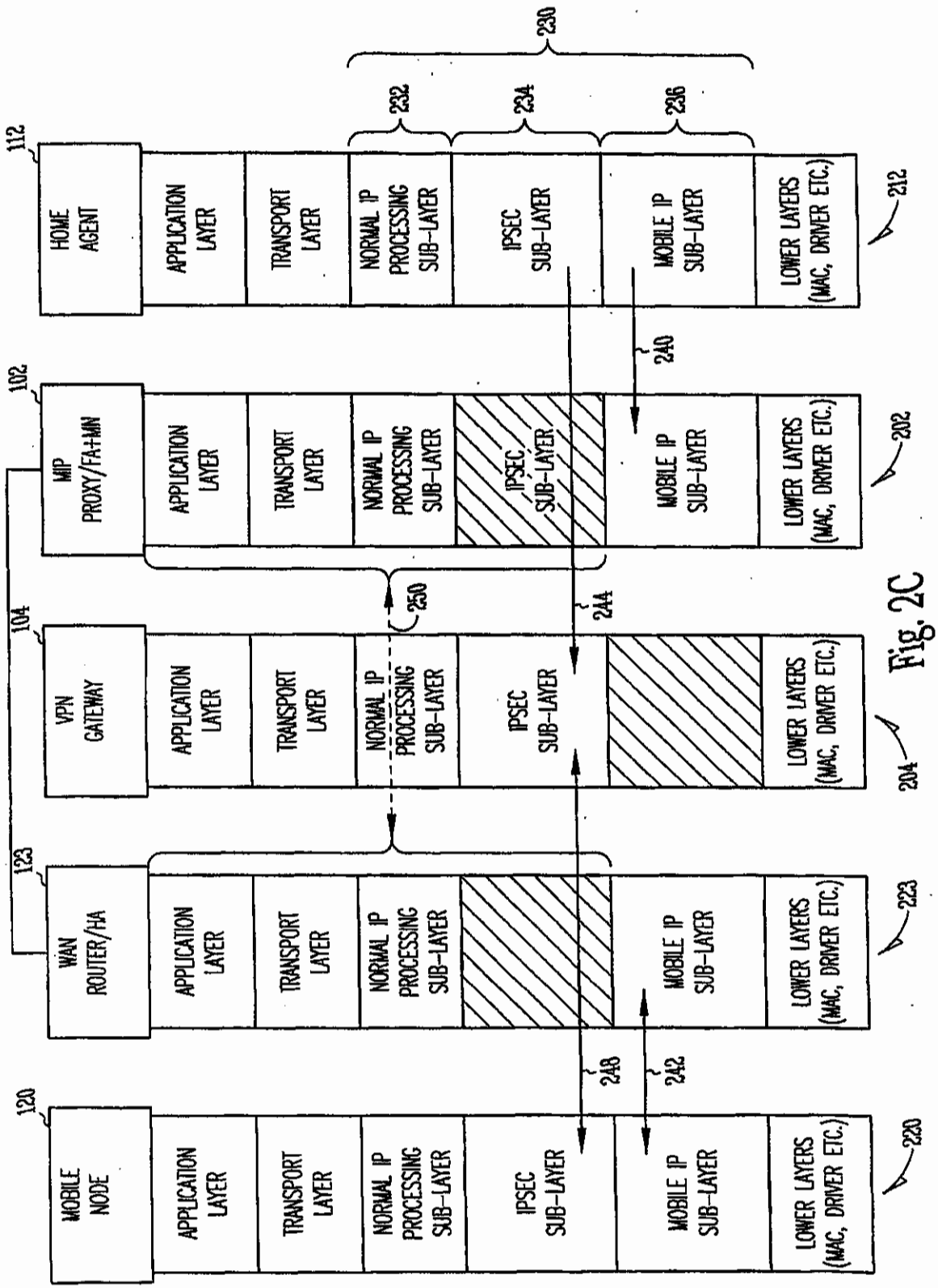

230
232
234
236
112
HOME AGENT
APPLICATION LAYER
TRANSPORT LAYER
NORMAL IP PROCESSING SUB-LAYER
IPSEC SUB-LAYER
MOBILE IP SUB-LAYER
LOWER LAYERS (MAC, DRIVER ETC.)
212
240
102
MIP PROXY/FA+HAN
202
250
244
104
VPN GATEWAY
204
123
WAN ROUTER/HA
223
248
242
120
MOBILE NODE
220

Fig. 2C

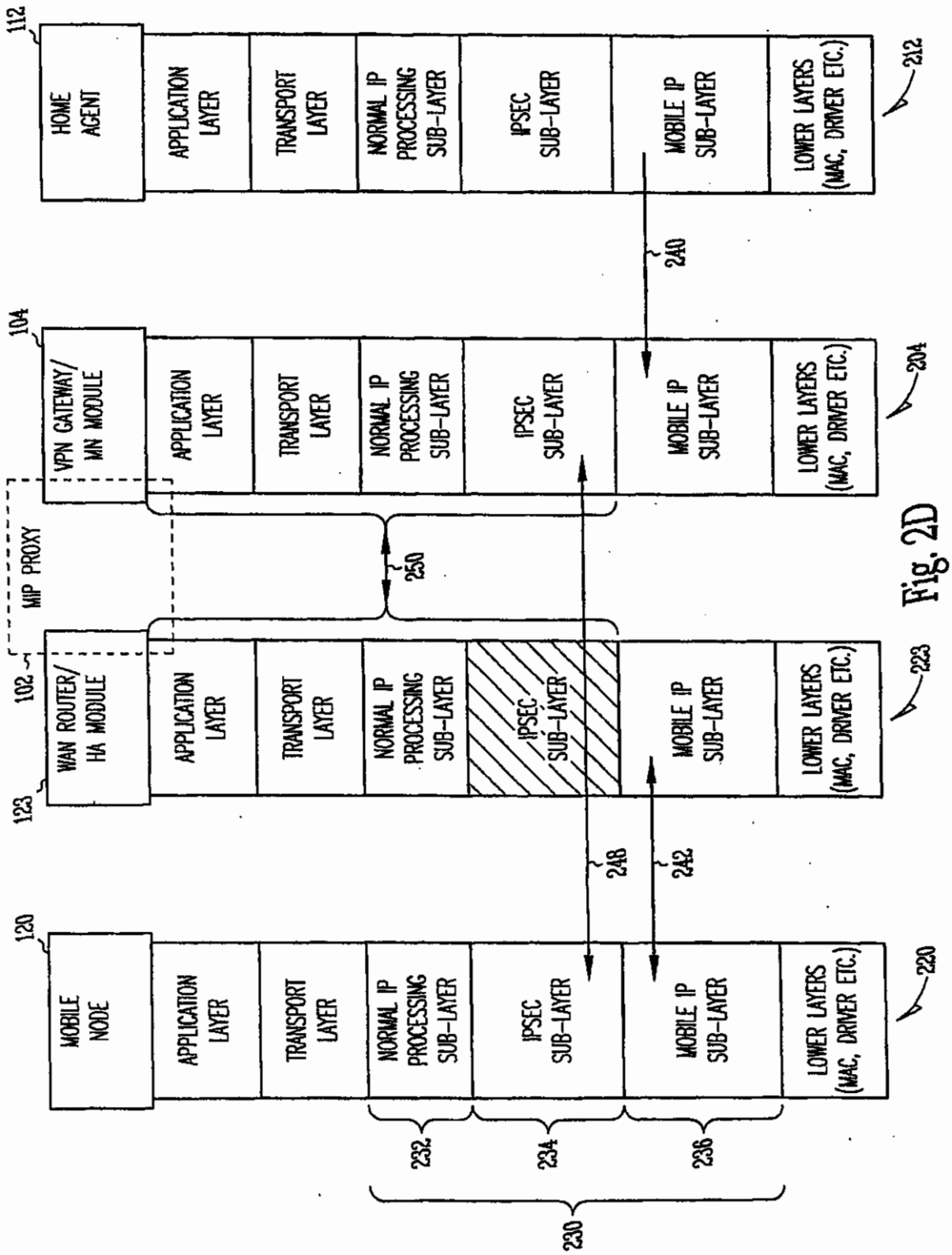

112
HOME AGENT
APPLICATION LAYER
TRANSPORT LAYER
NORMAL IP PROCESSING SUB-LAYER
IPSEC SUB-LAYER
MOBILE IP SUB-LAYER
LOWER LAYERS (MAC, DRIVER ETC.)
212
240
104
VPN GATEWAY/ MN MODULE
204
250
MIP PROXY
102
WAN ROUTER/ HA MODULE
123
223
248
242
120
MOBILE NODE
220
232
234
236
230

Fig. 2D

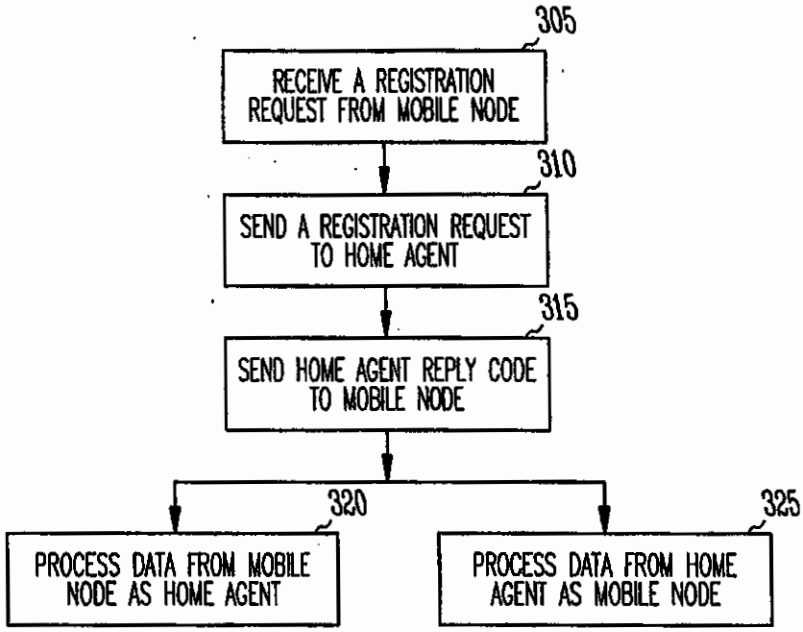

305
RECEIVE A REGISTRATION REQUEST FROM MOBILE NODE
310
SEND A REGISTRATION REQUEST TO HOME AGENT
315
SEND HOME AGENT REPLY CODE TO MOBILE NODE
320
PROCESS DATA FROM MOBILE NODE AS HOME AGENT
325
PROCESS DATA FROM HOME AGENT AS MOBILE NODE

Fig. 3

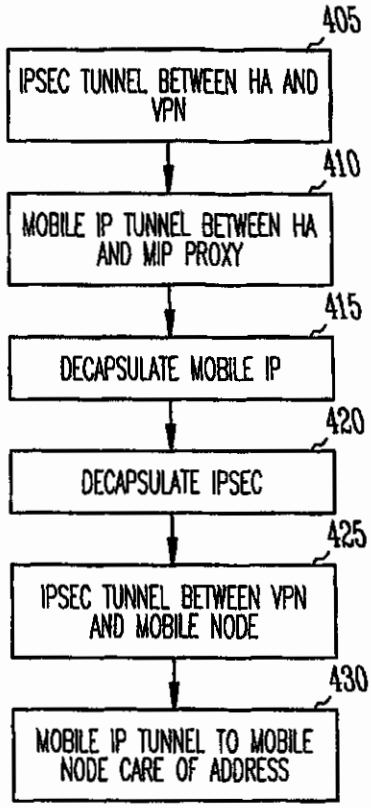

405
IPSEC TUNNEL BETWEEN HA AND VPN
410
MOBILE IP TUNNEL BETWEEN HA AND MIP PROXY
415
DECAPSULATE MOBILE IP
420
DECAPSULATE IPSEC
425
IPSEC TUNNEL BETWEEN VPN AND MOBILE NODE
430
MOBILE IP TUNNEL TO MOBILE NODE CARE OF ADDRESS

Fig. 4A

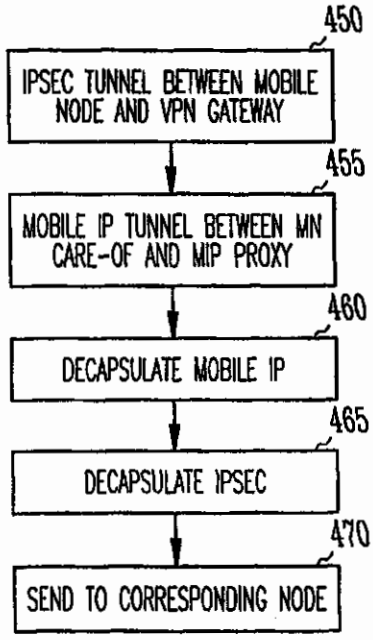

450
IPSEC TUNNEL BETWEEN MOBILE NODE AND VPN GATEWAY
455
MOBILE IP TUNNEL BETWEEN MN CARE-OF AND MIP PROXY
460
DECAPSULATE MOBILE IP
465
DECAPSULATE IPSEC
470
SEND TO CORRESPONDING NODE

Fig. 4B