Fig. 1

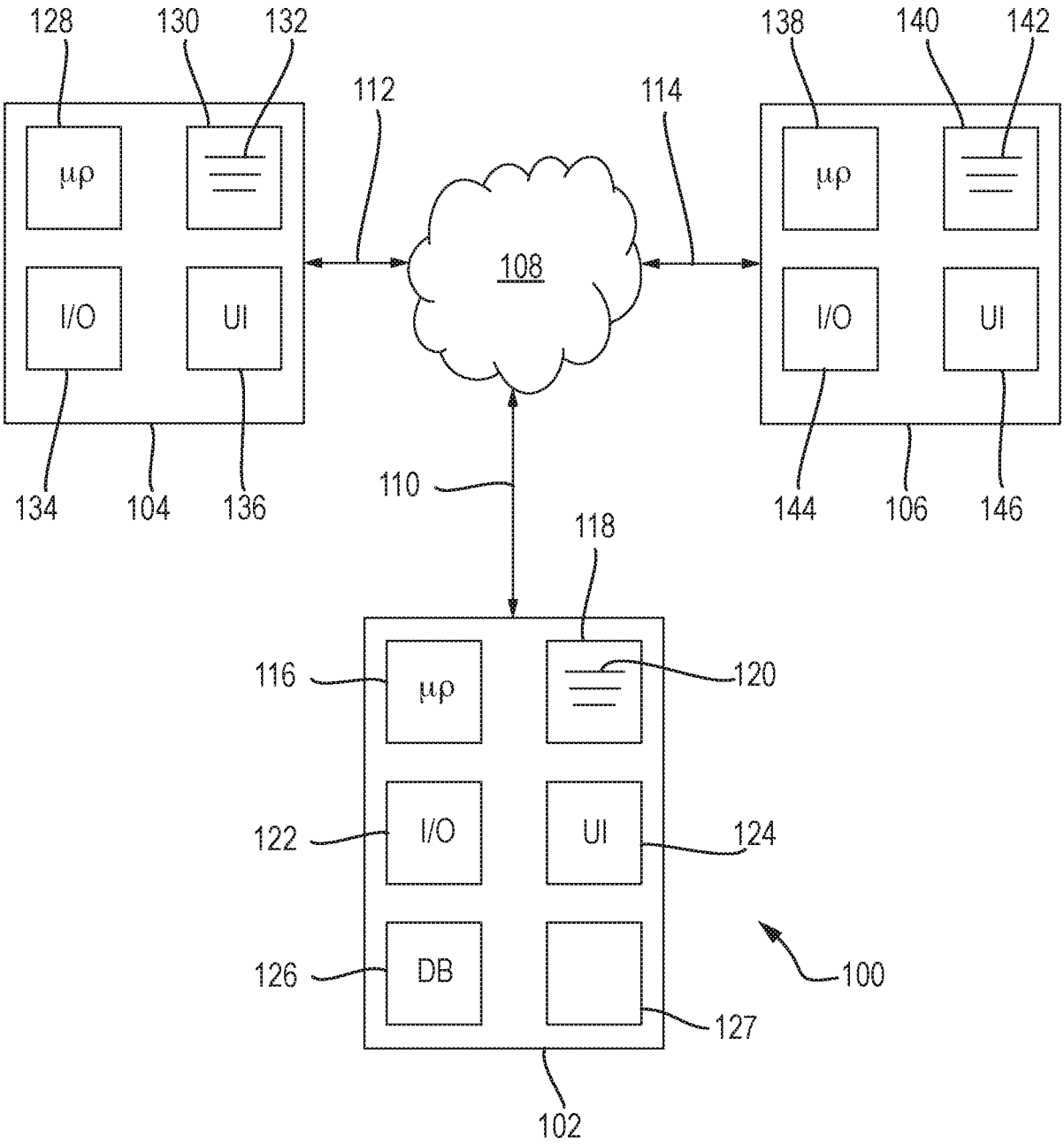

128
130
132
112
114
138
140
142
µp
I/O
UI
108
µp
I/O
UI
134
104
136
110
144
106
146
118
116
µp
120
122
I/O
UI
124
126
DB
100
127
102

Fig. 2

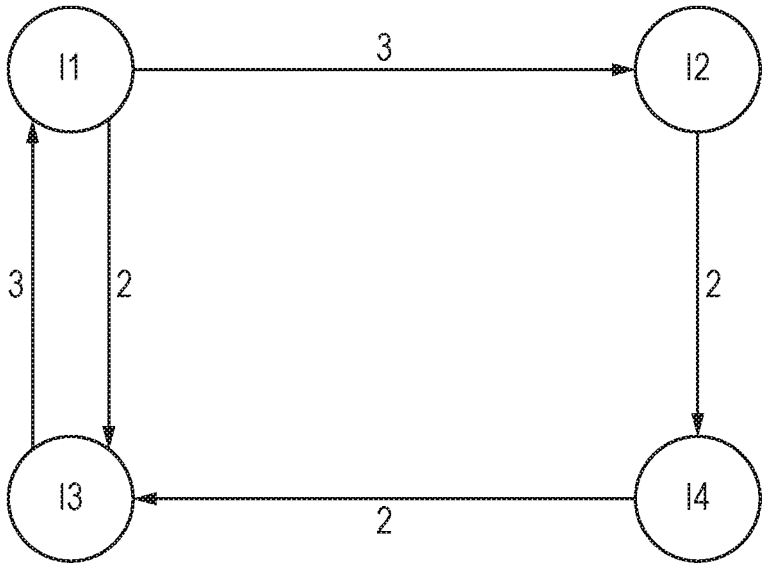

I1
I2
I3
I4
3
3
2
2
2
Edge-based graph
Diffusion graph
I1
I2
I3
I4
0.6
0.4
0.4
0.4

Fig. 3

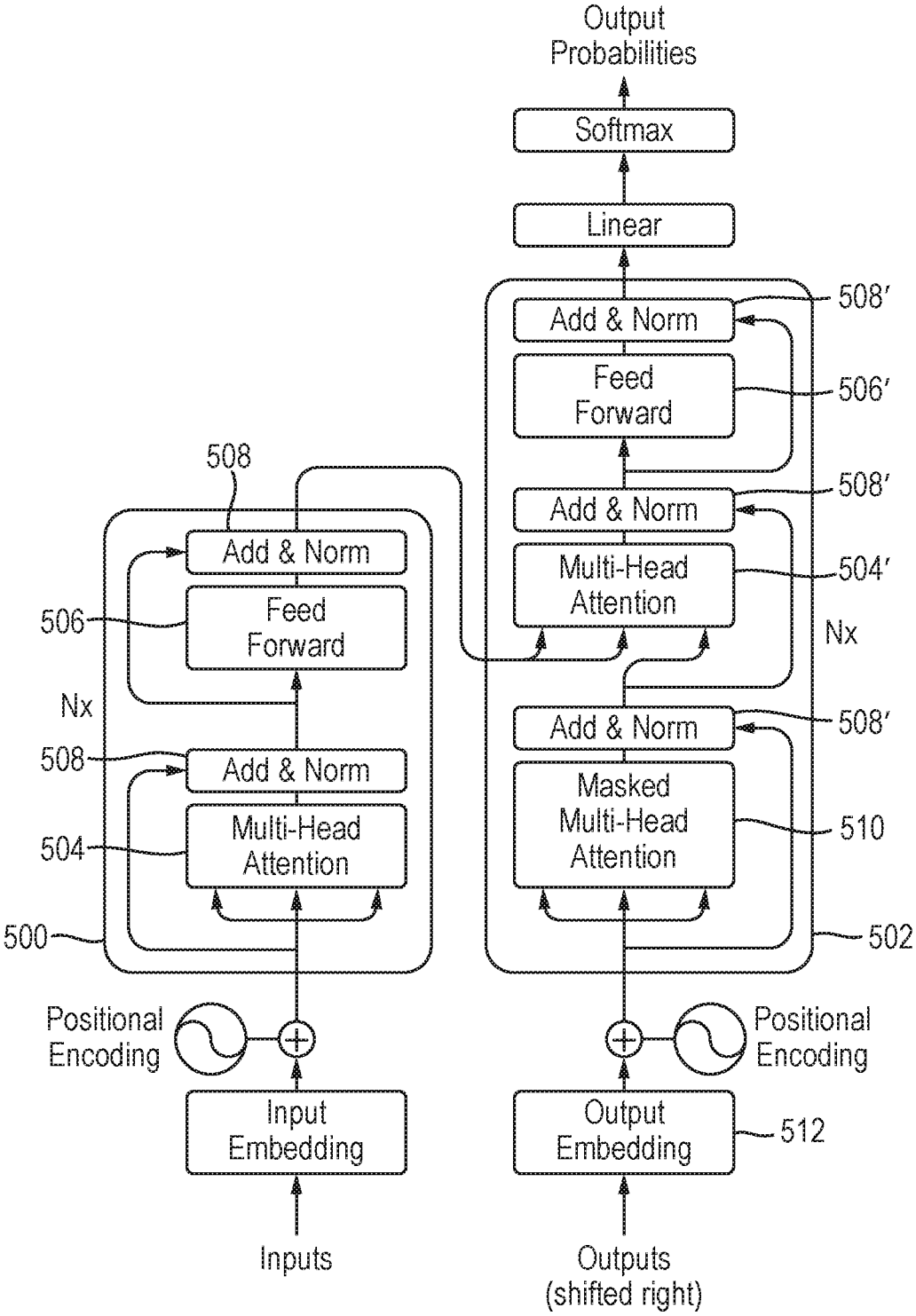

Output Probabilities
Softmax
Linear
Add & Norm
Feed Forward
Add & Norm
Multi-Head Attention
Add & Norm
Masked Multi-Head Attention
508′
506′
508′
504′
Nx
508′
510
502
508
Add & Norm
Feed Forward
506
Nx
Add & Norm
508
Multi-Head Attention
504
500
Positional Encoding
Input Embedding
Inputs
Positional Encoding
Output Embedding
512
Outputs (shifted right)

Fig. 3A

Prior Art

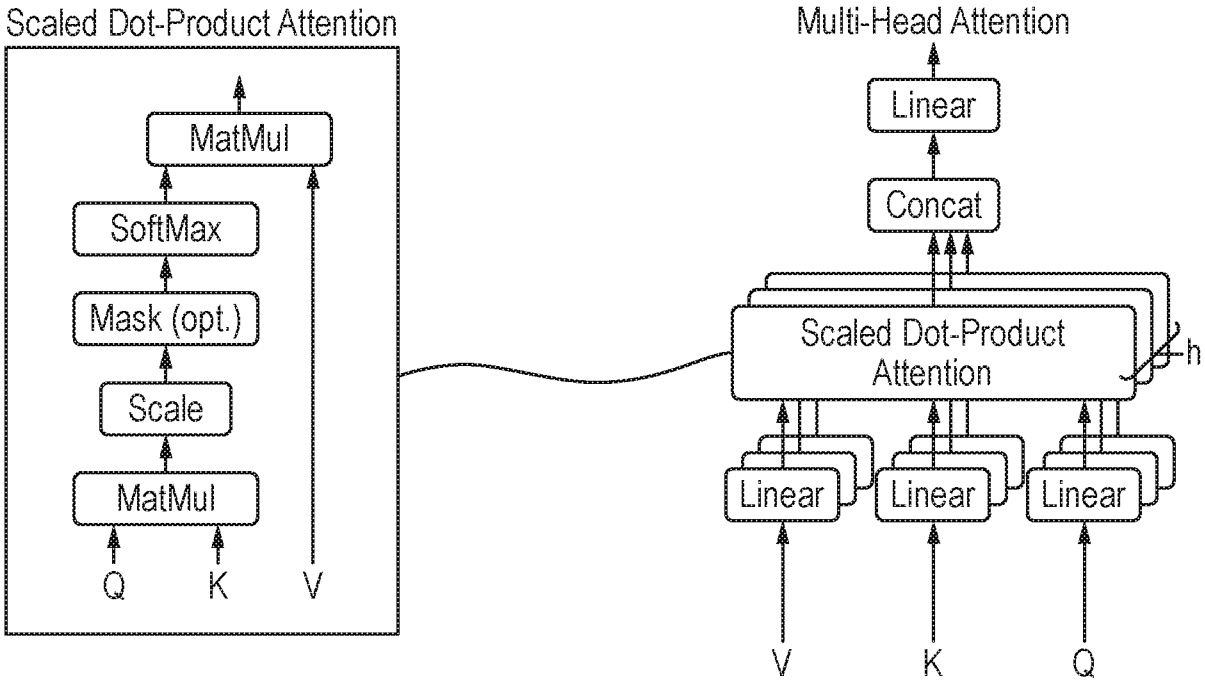


Fig. 4

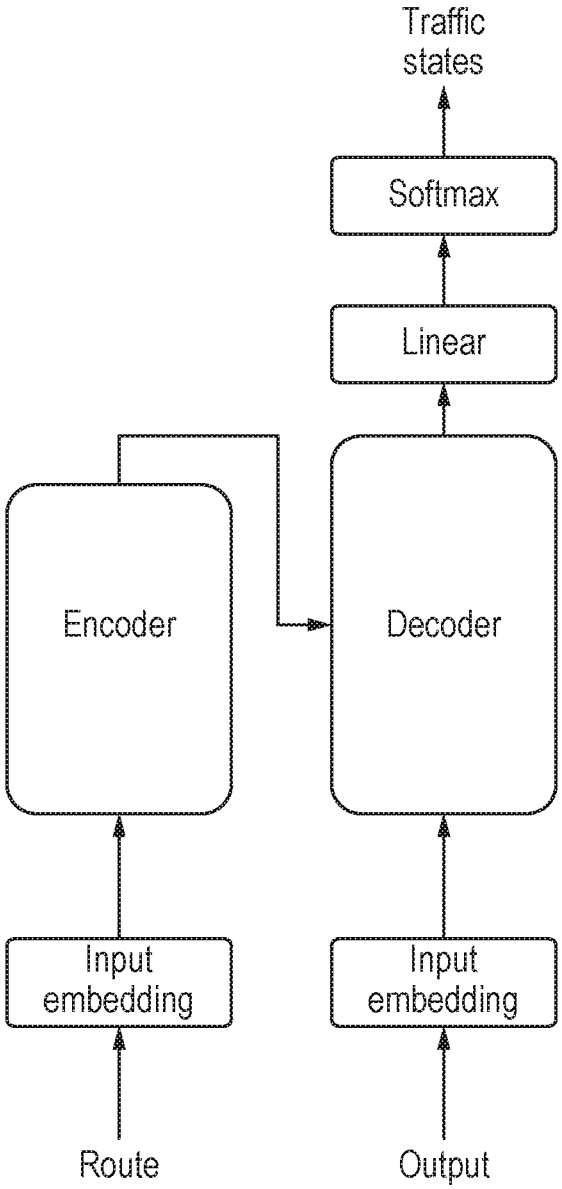

Traffic states
Softmax
Linear
Encoder
Decoder
Input embedding
Input embedding
Route
Output

Fig. 5

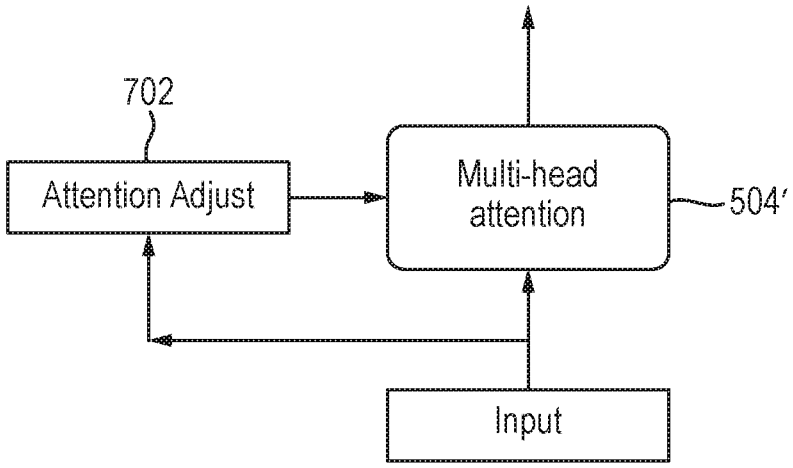

702
Attention Adjust
Multi-head attention
504'
Input

Fig. 6

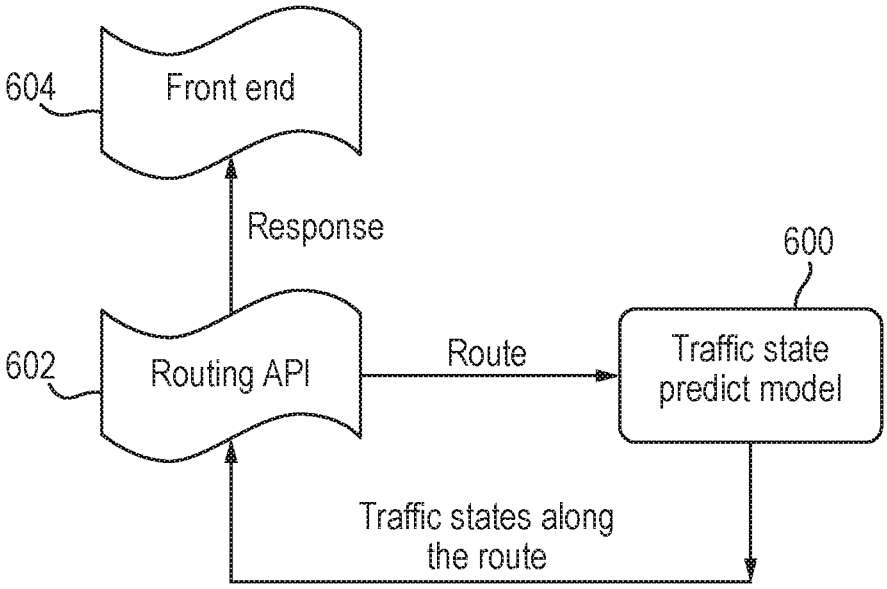

604
Front end
Response
600
602
Routing API
Route
Traffic state predict model
Traffic states along the route

Fig. 7

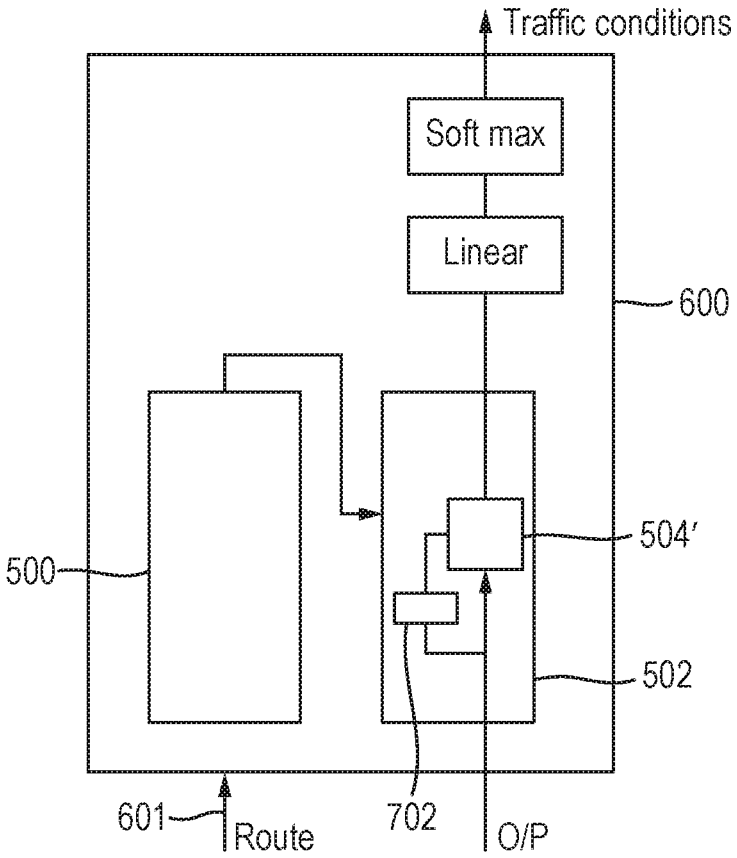
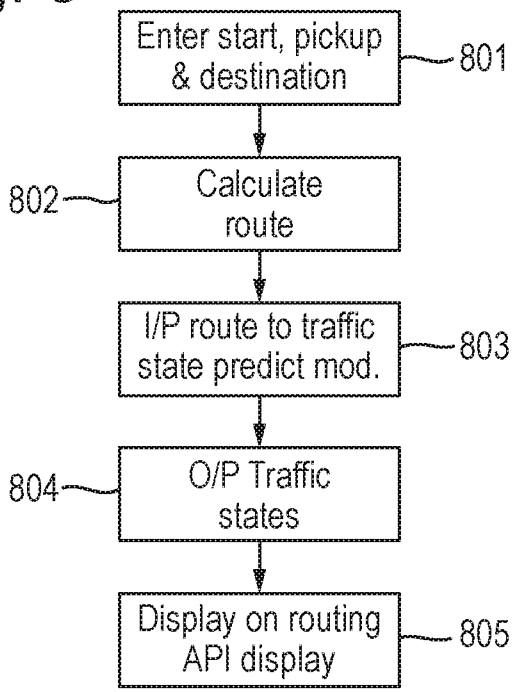

Traffic conditions
Soft max
Linear
600
504′
500
502
601
Route
702
O/P

Fig. 8


Enter start, pickup & destination
801
Calculate route
802
I/P route to traffic state predict mod.
803
O/P Traffic states
804
Display on routing API display
805