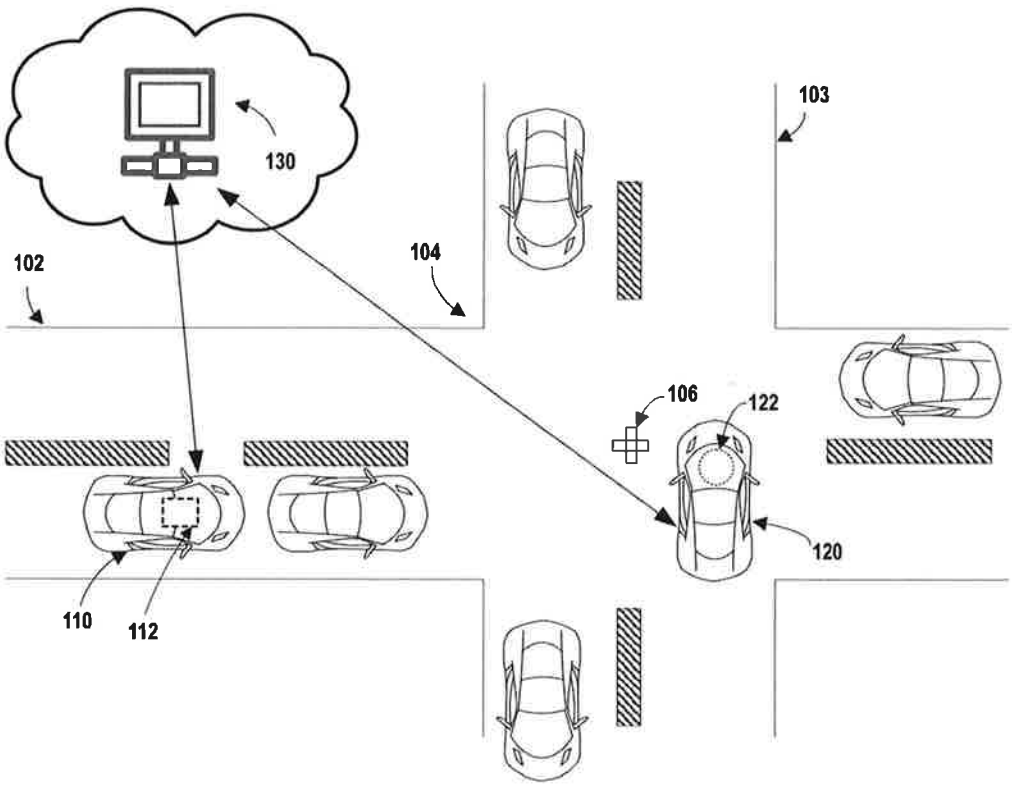

FIG. 1

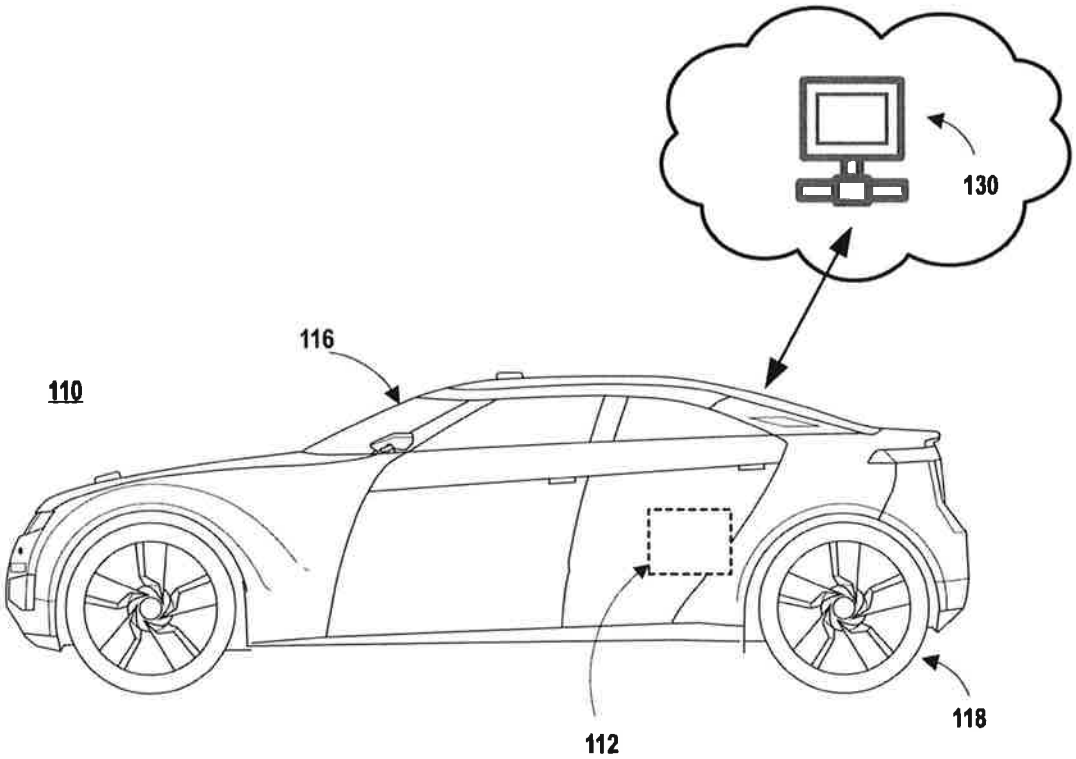

FIG. 2

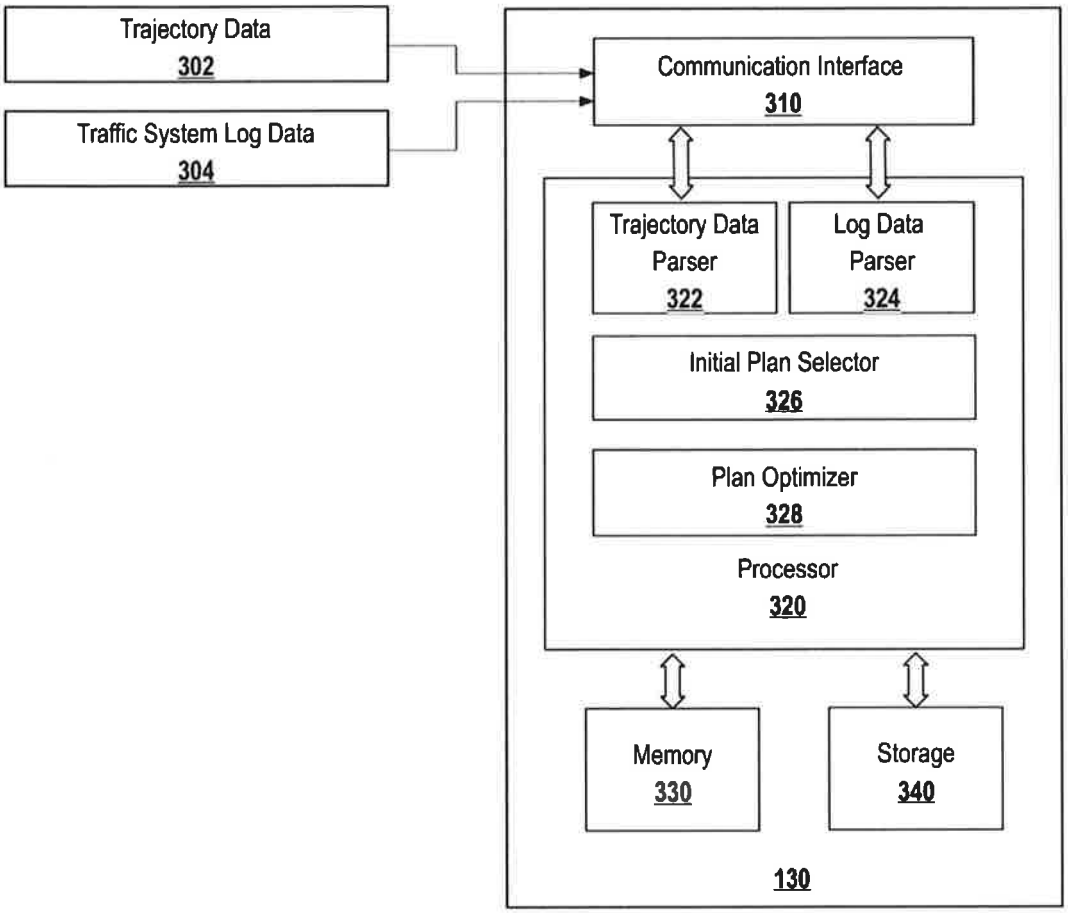
Trajectory Data
302
Traffic System Log Data
304
Communication Interface
310
Trajectory Data Parser
322
Log Data Parser
324
Initial Plan Selector
326
Plan Optimizer
328
Processor
320
Memory
330
Storage
340
130

FIG. 3

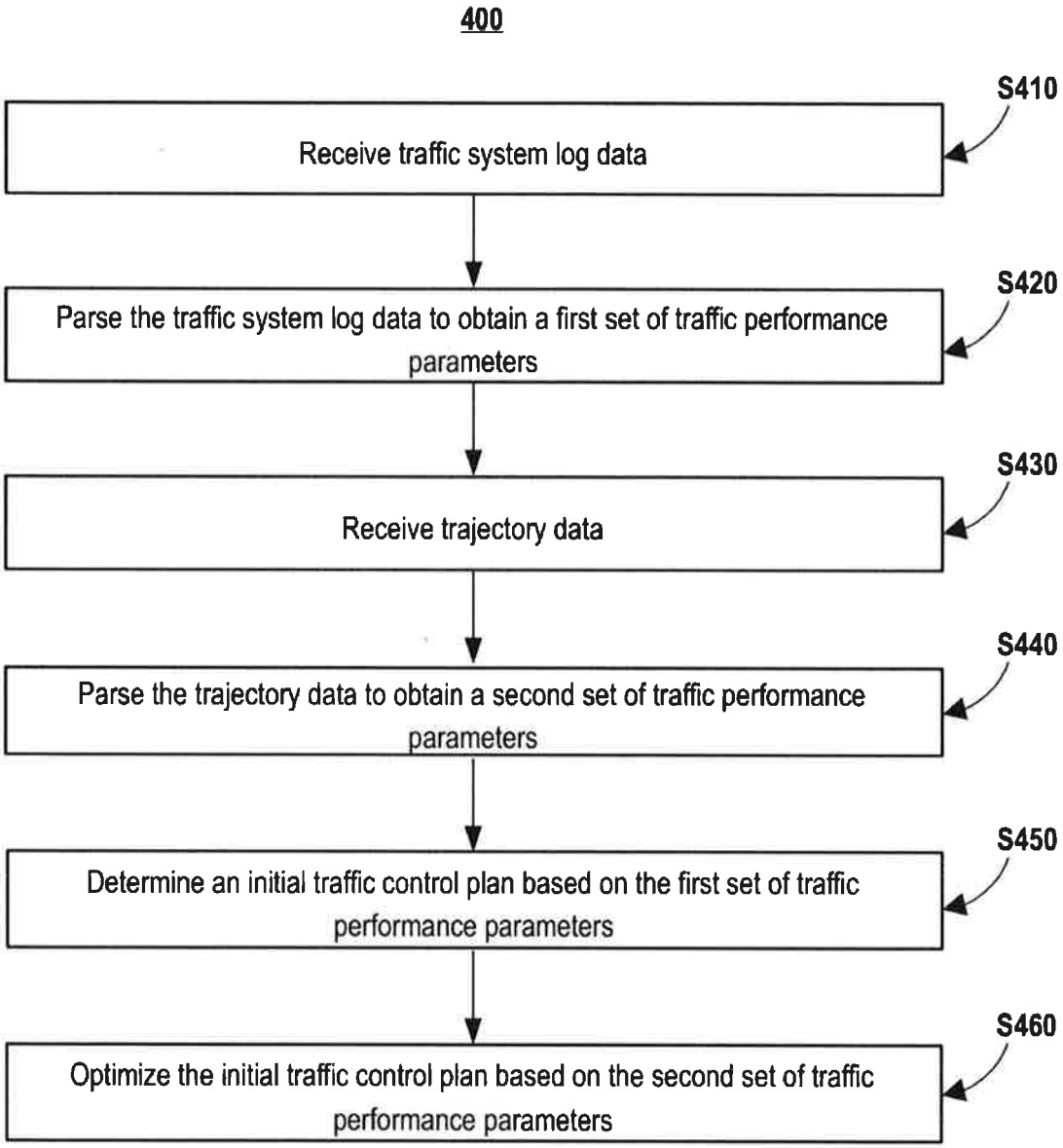
400
S410
Receive traffic system log data
S420
Parse the traffic system log data to obtain a first set of traffic performance parameters
S430
Receive trajectory data
S440
Parse the trajectory data to obtain a second set of traffic performance parameters
S450
Determine an initial traffic control plan based on the first set of traffic performance parameters
S460
Optimize the initial traffic control plan based on the second set of traffic performance parameters

FIG. 4

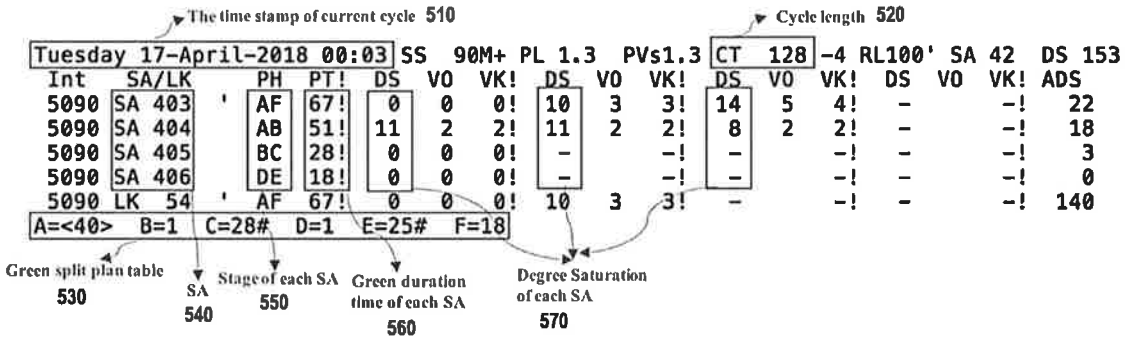
The time stamp of current cycle 510
Cycle length 520
Tuesday 17-April-2018 00:03 SS 90M+ PL 1.3 PVs1.3 CT 128 -4 RL100' SA 42 DS 153
Int SA/LK PH PT! DS VO VK! DS VO VK! DS VO VK! DS VO VK! ADS
5090 SA 403 ' AF 67! 0 0 0! 10 3 3! 14 5 4! - -! 22
5090 SA 404 AB 51! 11 2 2! 11 2 2! 8 2 2! - -! 18
5090 SA 405 BC 28! 0 0 0! - -! - -! - -! 3
5090 SA 406 DE 18! 0 0 0! - -! - -! - -! 0
5090 LK 54 ' AF 67! 0 0 0! 10 3 3! - -! - -! 140
A=<40> B=1 C=28# D=1 E=25# F=18
Green split plan table 530
SA 540
Stage of each SA 550
Green duration time of each SA 560
Degree Saturation of each SA 570

FIG. 5

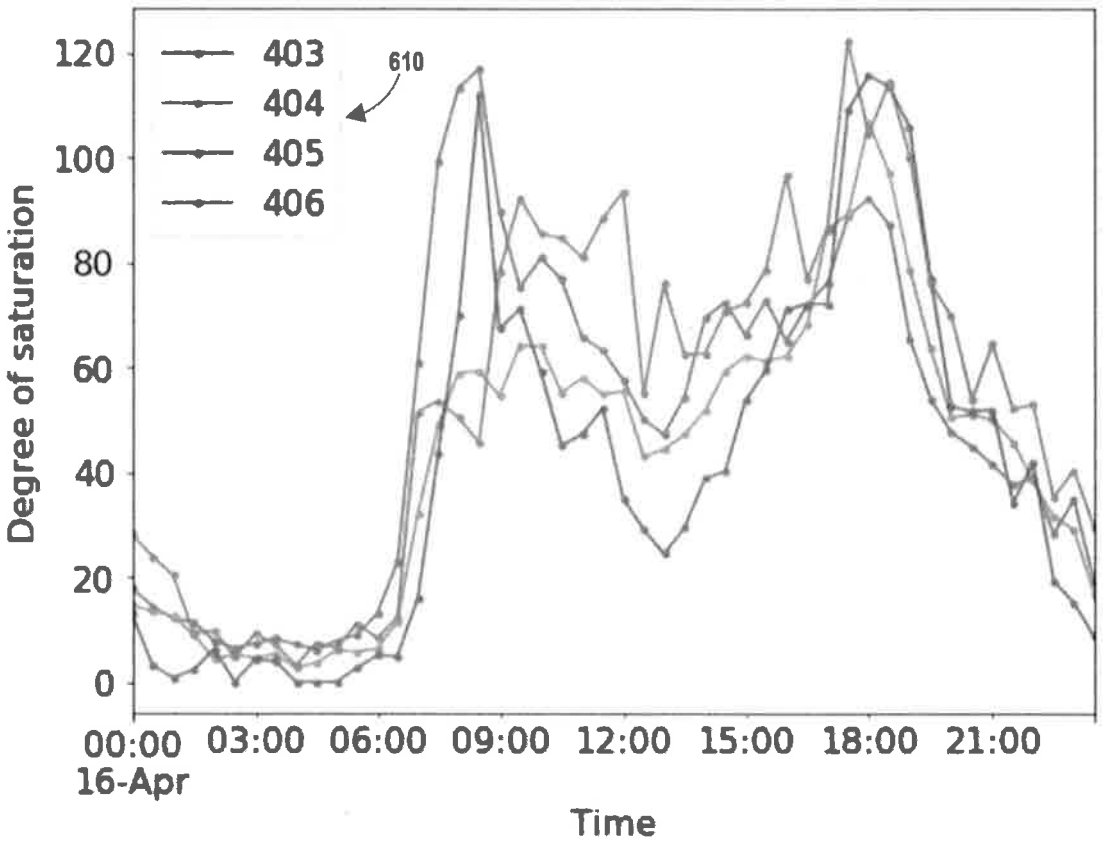
403
404
405
406
610
Degree of saturation
120
100
80
60
40
20
0
00:00
16-Apr
03:00
06:00
09:00
12:00
15:00
18:00
21:00
Time

FIG. 6

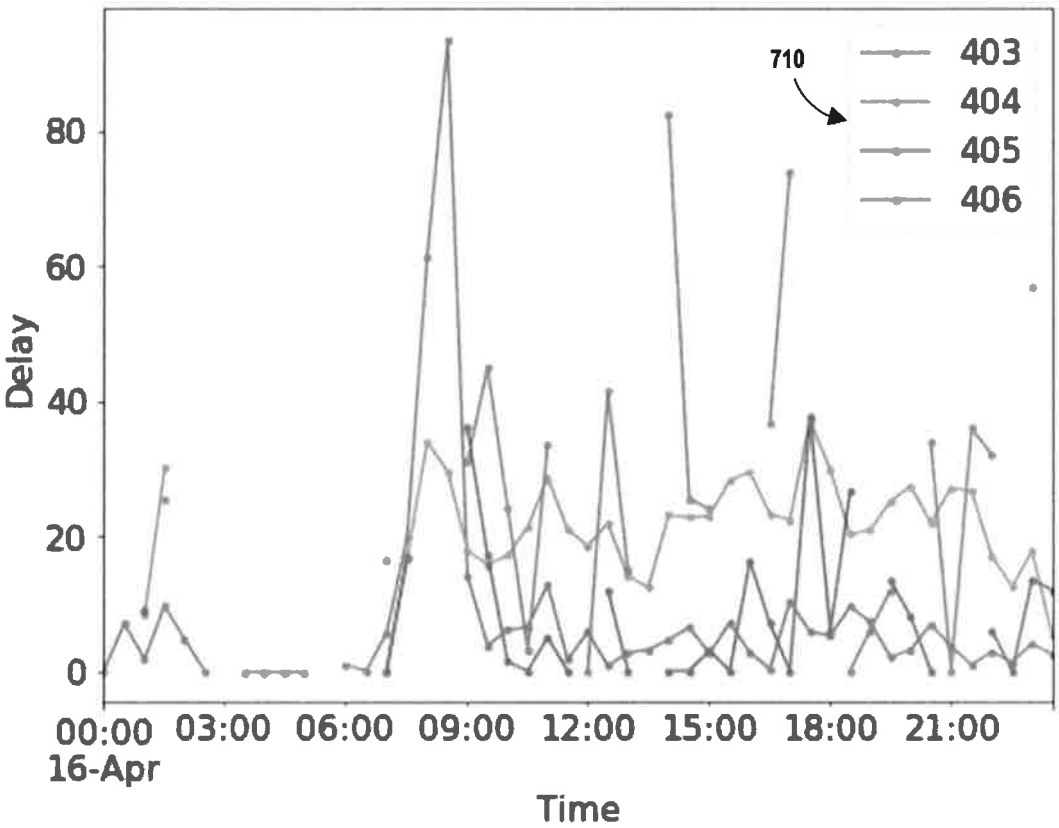
710
403
404
405
406
Delay
0
20
40
60
80
00:00
16-Apr
03:00
06:00
09:00
12:00
15:00
18:00
21:00
Time

FIG. 7

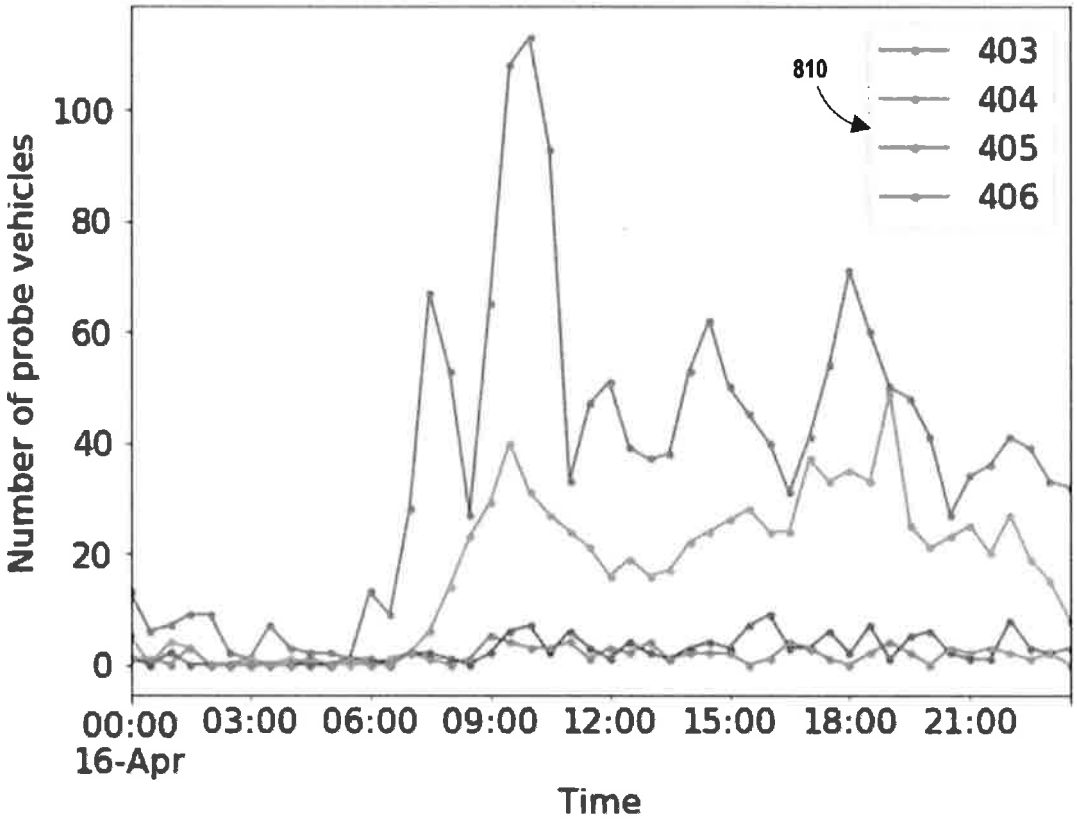
810
403
404
405
406
Number of probe vehicles
100
80
60
40
20
0
00:00
16-Apr
03:00
06:00
09:00
12:00
15:00
18:00
21:00
Time

FIG. 8