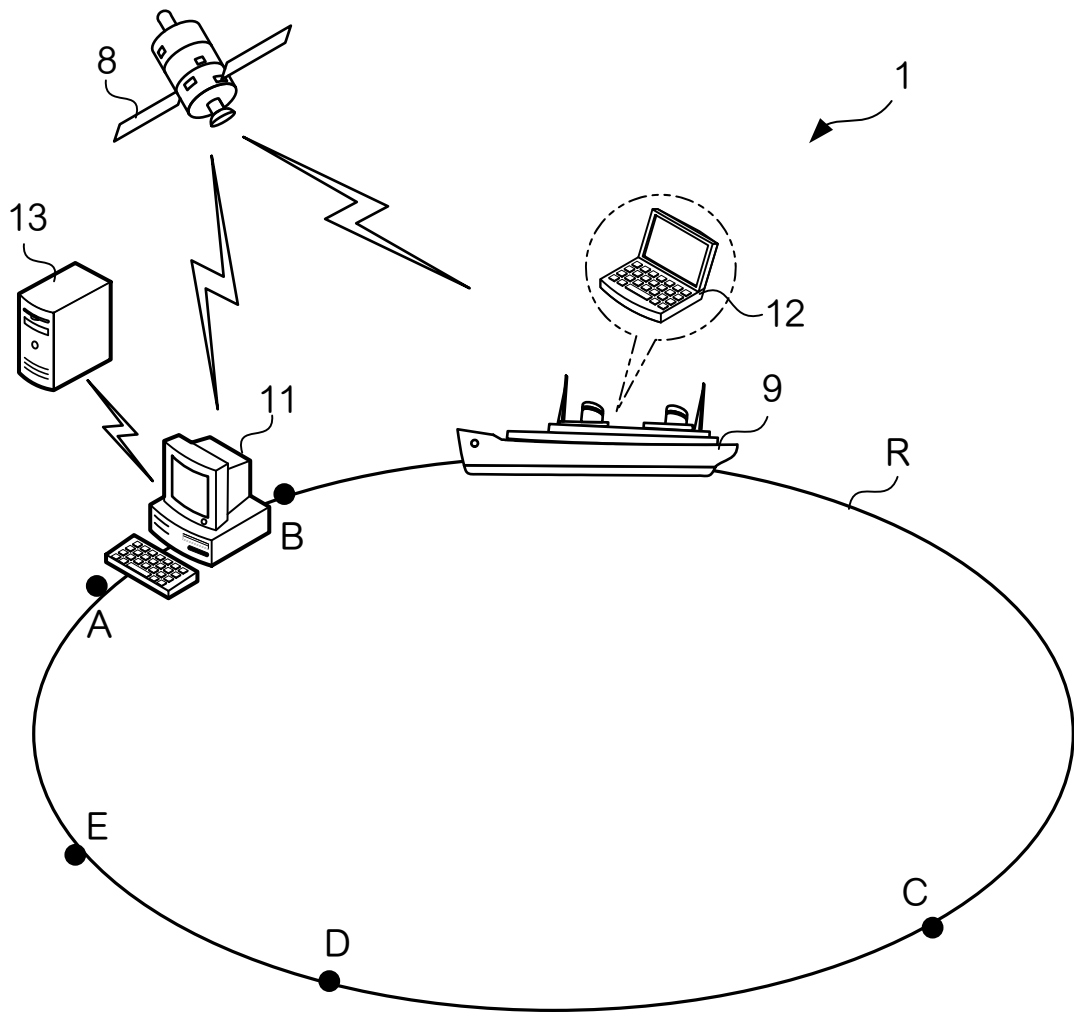
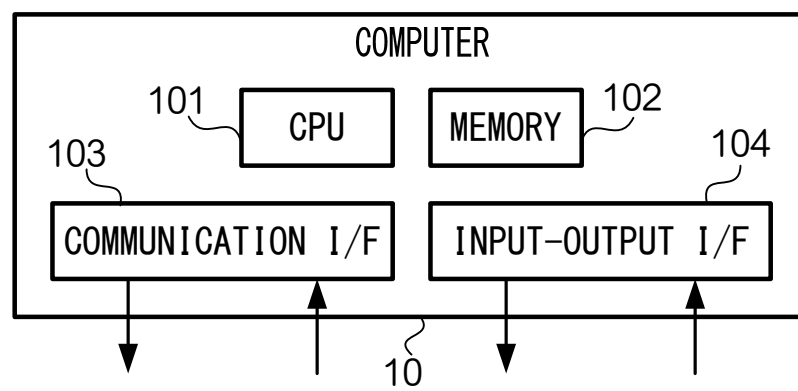


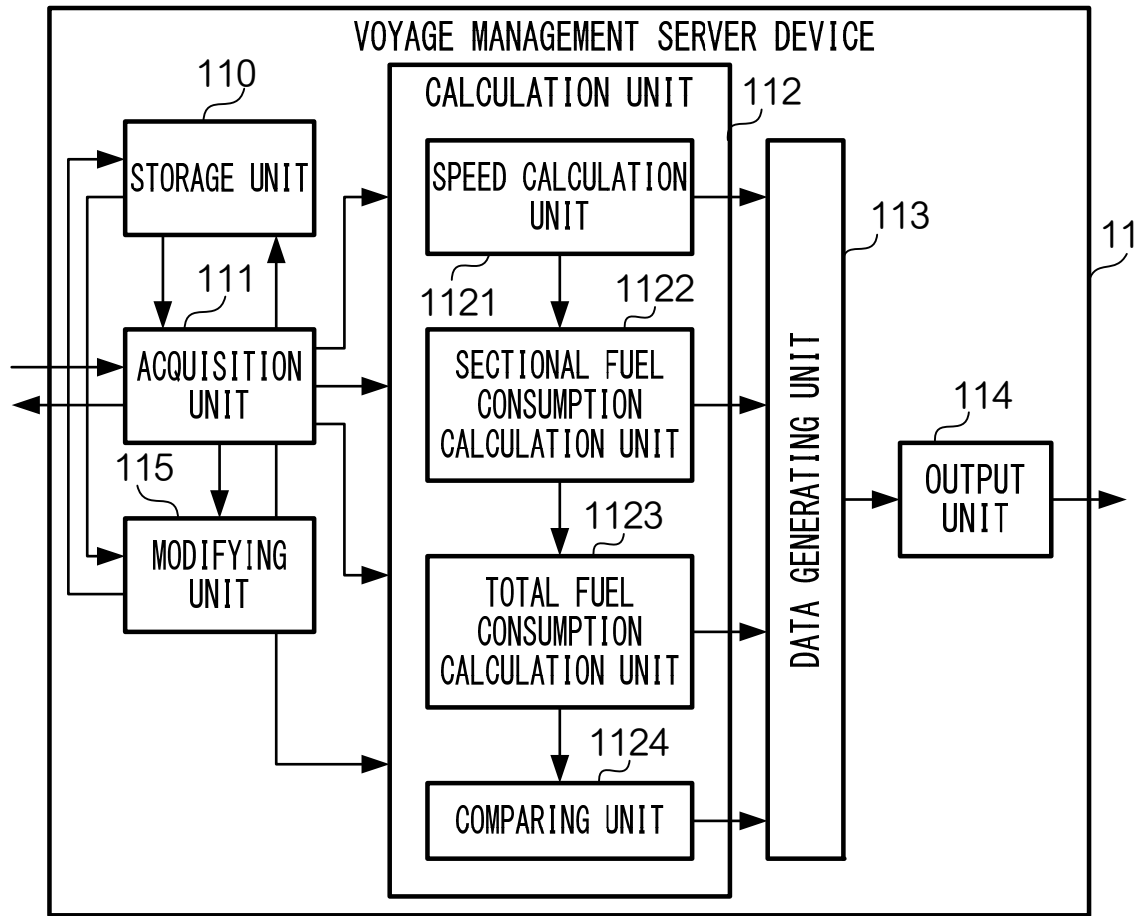
[FIG.1]



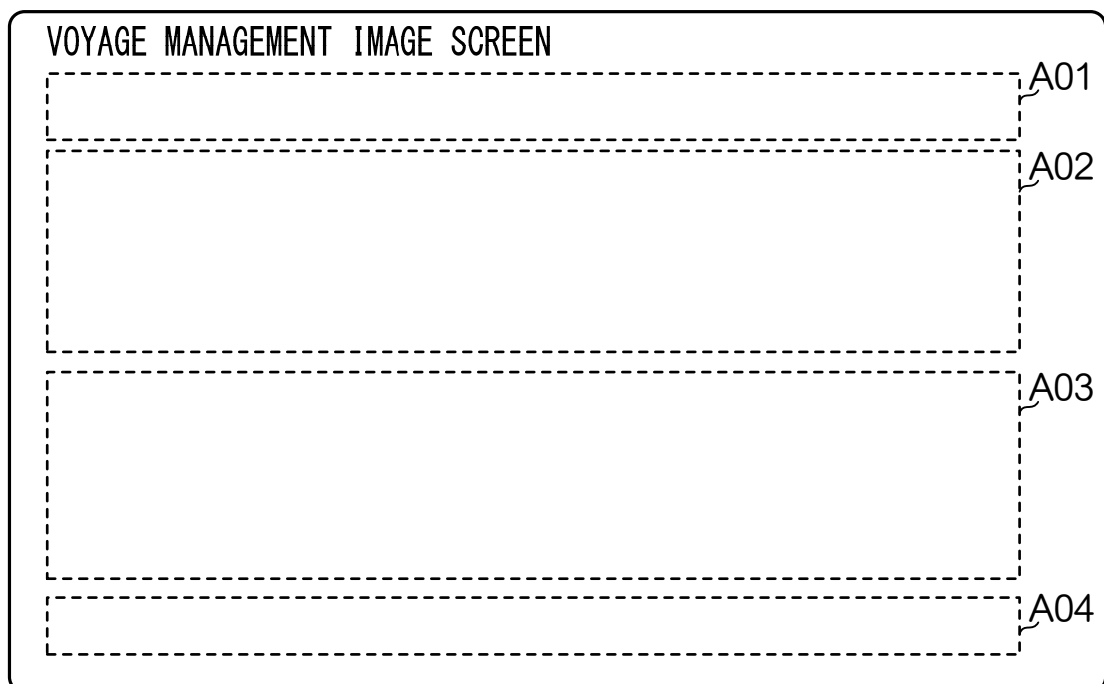
[FIG.2]



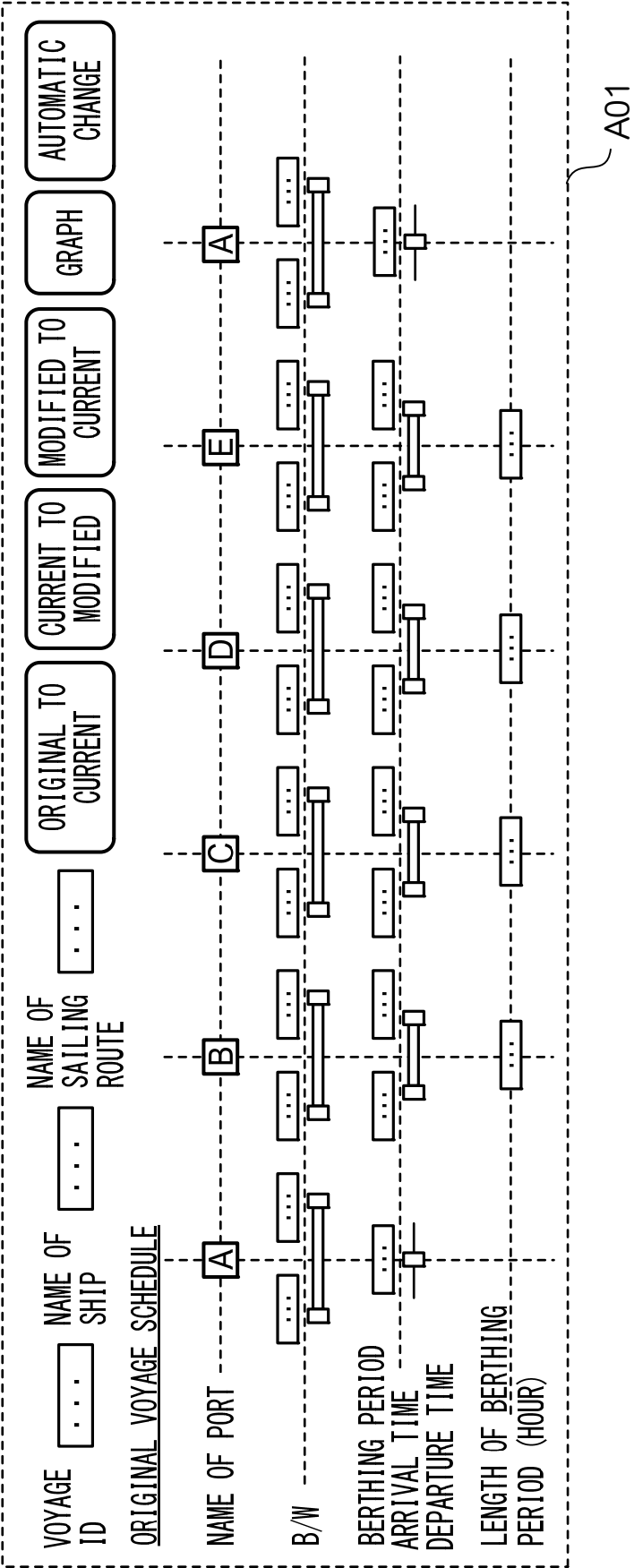
[FIG.3]



[FIG.4]



[FIG.5]



[FIG.6]

CURRENT VOYAGE SCHEDULE						
NAME OF PORT	A	B	C	D	E	A
SAILING DISTANCE (mile)	...	...	...	...	...	...
DRAFT (m)	...	...	...	...	...	...
TRIM (m)	...	...	...	...	...	...
WIND, WAVE, TIDE	↖ ↙	↖ ↙	↖ ↗	↖ ↗	↖ ↗	↖ ↗
B/W	...	...	...	...	...	...
BERTHING PERIOD	...	...	...	...	...	...
ARRIVAL TIME	...	...	...	...	...	...
DEPARTURE TIME	...	...	...	...	...	...
LENGTH OF BERTHING PERIOD (HOUR)	...	...	...	...	...	...
TIME DIFFERENCE	...	...	...	...	...	...

A02

[FIG.7]

MODIFIED VOYAGE SCHEDULE									
NAME OF PORT	A	B	C	D	E	A	DELETE PORT	ADD PORT	
SAILING DISTANCE (mile)	...	...	...	...	...	...			
DRAFT (m)	...	...	...	...	...	...			
TRIM (m)	...	...	...	...	...	...			
WIND, WAVE, TIDE	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗			
B/W	...	...	...	...	...	...			
BERTHING PERIOD	...	...	...	...	...	...			
ARRIVAL TIME	...	...	...	...	...	...			
DEPARTURE TIME	...	...	...	...	...	...			
LENGTH OF BERTHING PERIOD (HOUR)	...	...	...	...	...	...			
TIME DIFFERENCE	...	...	...	...	...	...			

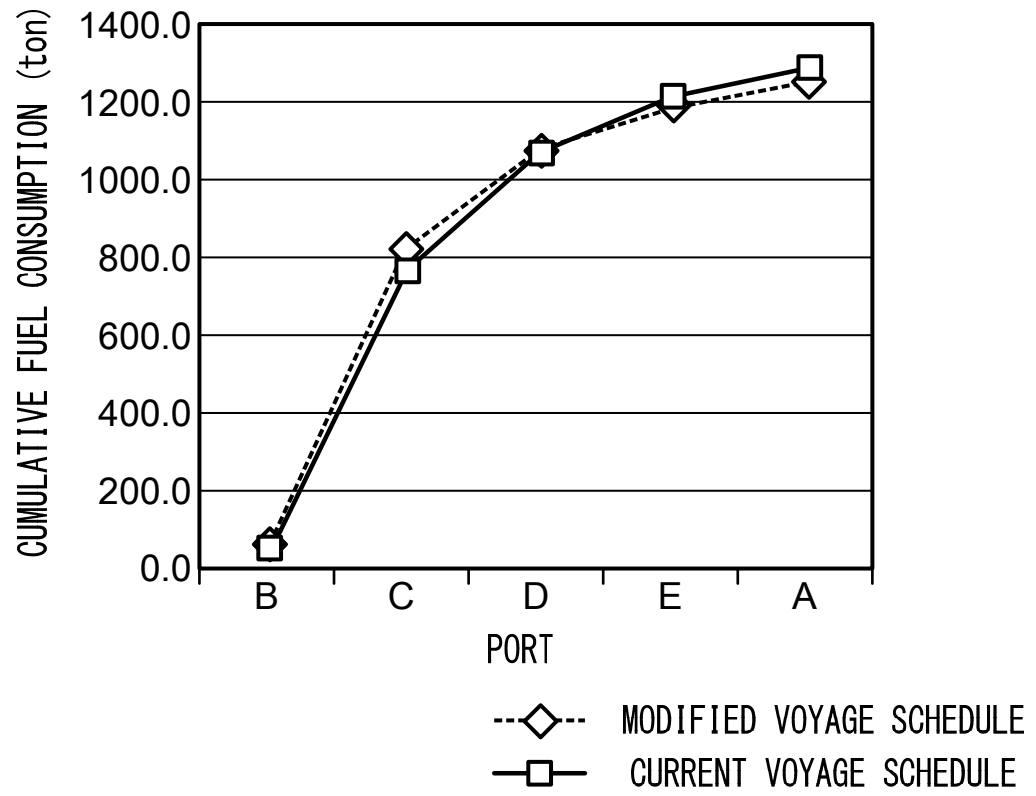
A03

[FIG.8]

RECORD OF ACTUAL VOYAGE									
BERTHING PERIOD	-	-	-	-	-	-	-	-	-
FUEL CONSUMPTION (ton)	-	-	-	-	-	-	-	-	-
DIFFERENCE OF FUEL CONSUMPTION (ton)	-8.0	+55.1	-53.0	-24.3	-13.2	Total	-43.4		

A04

[FIG.9]



[FIG.10A]

TABLE OF VOYAGE INFORMATION PER SECTIONAL SAILING ROUTE											
VOYAGE ID "###," NAME OF SHIP "###," NAME OF SAILING ROUTE "###"											
SECTIONAL SAILING ROUTE	SAILING DISTANCE	DRAFT	TRIM	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	WAVE DIRECTION	TIDE SPEED	TIDE DIRECTION	FUEL CONSUMPTION	SAILING DISTANCE (ACTUALLY MEASURED)
A - B	...	...	...	...	...	...	...	...	...	-	-
B - C	...	...	...	...	...	...	...	...	...	-	-
C - D	...	...	...	...	...	...	...	...	...	-	-
D - E	...	...	...	...	...	...	...	...	...	-	-
E - A	...	...	...	...	...	...	...	...	...	-	-

[FIG.10B]

TABLE OF VOYAGE
INFORMATION PER PORT

PORT	ORIGINAL VOYAGE SCHEDULE						CURRENT VOYAGE SCHEDULE					
	BERTH WINDOW			BERTHING PERIOD			BERTH WINDOW			BERTHING PERIOD		
	STARTING TIME	ENDING TIME	LOCKED	STARTING TIME	ENDING TIME	LOCKED	STARTING TIME	ENDING TIME	LOCKED	STARTING TIME	ENDING TIME	LOCKED
A	...	...	...	...	...	...	...	...	...	...	...	...
B	...	...	...	...	...	...	...	...	...	...	...	...
C	...	...	...	...	...	...	...	...	...	...	...	...
D	...	...	...	...	...	...	...	...	...	...	...	...
E	...	...	...	...	...	...	...	...	...	...	...	...
A	...	...	...	...	...	...	...	...	...	...	...	...

MODIFIED VOYAGE SCHEDULE												RECORD OF ACTUAL VOYAGE	
BERTH WINDOW						BERTHING PERIOD						BERTHING PERIOD	
STARTING TIME	LOCKED	ENDING TIME	LOCKED	STARTING TIME	LOCKED	STARTING TIME	LOCKED	ENDING TIME	LOCKED	STARTING TIME	LOCKED	STARTING TIME	ENDING TIME
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...

[FIG.14]

TIME PERIOD "###-###," SEA AREA "##-##"

WIND DIRECTION	WIND SPEED	WAVE HEIGHT	WAVE DIRECTION	TIDE SPEED	TIDE DIRECTION
...	...	...	...	...	...

[FIG.15]

(a)

SECTIONAL SAILING ROUTE	DRAFT	TRIM
...	...	...

(b)

PORT DEPARTED BY SHIP	DEPARTURE TIME
...	...

(c)

MEASURING TIME	FUEL CONSUMPTION	SAILING DISTANCE
...	...	...

(d)

PORT ARRIVED BY SHIP	ARRIVAL TIME
...	...