

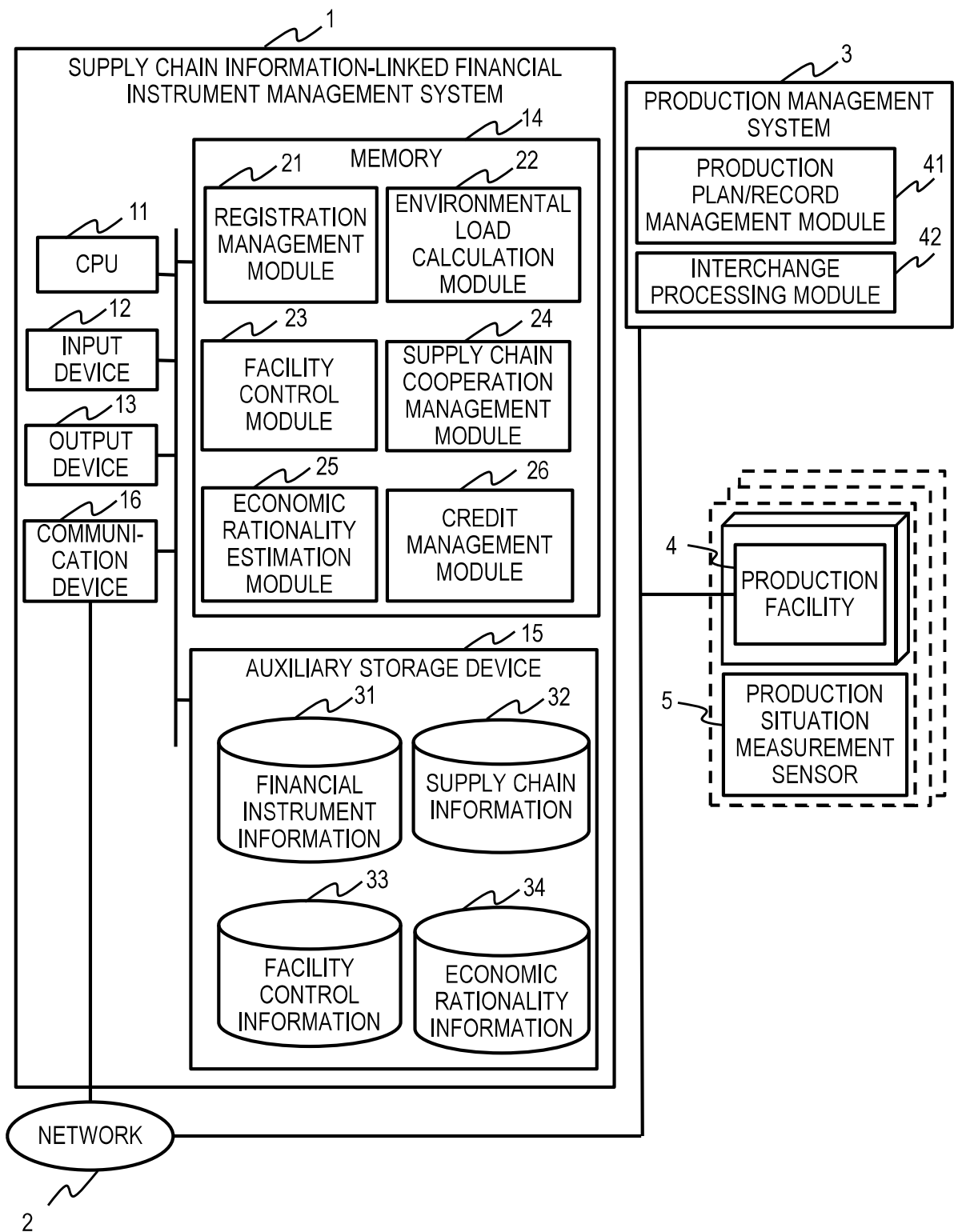


FIG. 1

FINANCIAL INSTRUMENT INFORMATION					
FINANCIAL INSTRUMENT ID	FINANCIAL INSTRUMENT NAME	USER ID	PERIOD	INTEREST RATE	...
F01	CO2 EMISSION AMOUNT-LINKED BOND	U001	20220322 - 20240331	WHEN TARGET IS ACHIEVED: 2.0%/YEAR WHEN TARGET IS UNDERACHIEVED: 4.0%/YEAR	...
F02	CHEMICAL SUBSTANCE EMISSION AMOUNT-LINKED BOND	U002	20220401 - 20230331	WHEN TARGET IS ACHIEVED: 1.0%/YEAR WHEN TARGET IS UNDERACHIEVED: 2.2%/YEAR	...
...	...	...	...	...	...

121 122 123 124 125

FIG. 2A

FINANCIAL INSTRUMENT INFORMATION				
...	TARGET VALUE	LOAN AMOUNT	STATUS	CONTROL RIGHT SALE AND PURCHASE RECORD
...	EQUIVALENT TO CO2 EMISSION AMOUNT OF 2,000 kg	10 MILLION YEN	DATE:2022/4/1 EMISSION AMOUNT:2.7kg STATE: WITHIN RANGE	DATE:2022.4.20 CONTROL RIGHT TRADING PRICE:¥1,000/kg TRADE AMOUNT:WHOLE AMOUNT TRADE DESTINATION: INVESTOR AAA
...	EQUIVALENT TO EMISSION AMOUNT OF 1,000 kg	30 MILLION YEN	DATE:2022/1 EMISSION MOUNT:21kg (TOLUENE:10kg THINNER: 11kg) STATE: WITHIN RANGE	
...	...	...	...	...

126 127 128 129

FIG. 2B

SUPPLY CHAIN INFORMATION							
SUPPLY CHAIN TASK ID	ORDER RECEPTION USER ID	TASK CLASSIFICATION	DELIVERY DATE	NUMBER OF PRODUCTS IN RECEIVED ORDER	FINISHED PRODUCTS IN STOCK	ESTIMATED ENVIRONMENTAL LOAD	...
SC01	U001	MANUFACTURING	APRIL 11, 2022	100	200	3 kg	...
SC02	U002	DELIVERY	MARCH 1-10, 2020	2	0	2 kg	...
:							...

131 132 133 134 135 136 137

FIG. 3A

SUPPLY CHAIN INFORMATION						
...	ESTIMATED PROFIT UNIT PRICE	ORDER PLACEMENT USER ID	WORK PERIOD	WORK FACILITY	FACILITY OPERATION TIME	...
...	100	U321	-APRIL 11, 2022	PRESS FACILITY A	2 hours	...
...	1000	U001	1 DAY	EV TRUCK	50 min	...
...						...

138 139 140 141 142

32

FIG. 3B

SUPPLY CHAIN INFORMATION			
...	COMPONENT/MATERIAL TYPE	COMPONENT/MATERIAL IN STOCK	PROGRESS RATE
...	METAL, ALUMINUM, U SHAPE	1000	90%
...	-	0	10%
...			

FIG. 3C

ECONOMIC RATIONALITY INFORMATION					
ECONOMIC RATIONALITY ID	SUPPLY CHAIN TASK ID	TASK CLASSIFICATION	ECONOMIC RATIONALITY ARITHMETIC EXPRESSION	DESCRIPTION	...
E01	SC01	MANUFACTURING	$y = a x - b$	PREFERENTIALLY USE HELD STOCK AMOUNT IN STOCK IS USED AS VARIABLE x	...
E02	SC01	MANUFACTURING	$y = (a x - b) * (-c)$	CHANGE OPERATION TIME FROM 10:00- TO 20:00 AMOUNT IN STOCK IS USED AS VARIABLE x	...
E03	SC02	DELIVERY	$y = a x - b$	JOINT DELIVERY USE XXX (AMOUNT TO BE PASSED TO DELIVERY COMPANY A) AS VARIABLE x	...
...	...	...	...	...	...

FIG. 4A

ECONOMIC RATIONALITY INFORMATION							
...	STOCK/ TIME SHIFT	FACILITY SHIFT	MATERIAL CHANGE	PROCESSING METHOD CHANGE	URGENCY	CONTROL TARGET	ECONOMIC RATION- ALITY
...	STOCK FIRST OUT a = 30	DELIVERY COST b = 30				1 INTER- CHANGEABLE AMOUNT:0.3kg	2022.4.10 y = 270
...	a=100			b=30	c=0.95	1 INTER- CHANGEABLE AMOUNT:0.3kg	
...	a = 2	b = 300	-	-			
...	...	...	...	...	...	...	...

156 157 158 159 160 161 162

FIG. 4B

FACILITY CONTROL INFORMATION					
FACILITY ID	ADDRESS	ECONOMIC RATIONALITY ID	CONTROL COMMAND	CONTROL AMOUNT	CONDITION
3	http://xxx/Device/00032	E01	OFF	12min (FACILITY OPERATION TIME 2 HOURS × REMAINING PROGRESS RATE 100-90%)	SCHEDULE CONVERSION TO SPECIFIED TIME 10:00-10:12
4	http://yyy/Device/Control	E02	Power Down		
5	http://yyy/Device/Control	E03	OFF		
...	...	...	...	...	...

171 172 173 174 175 176

FIG. 5

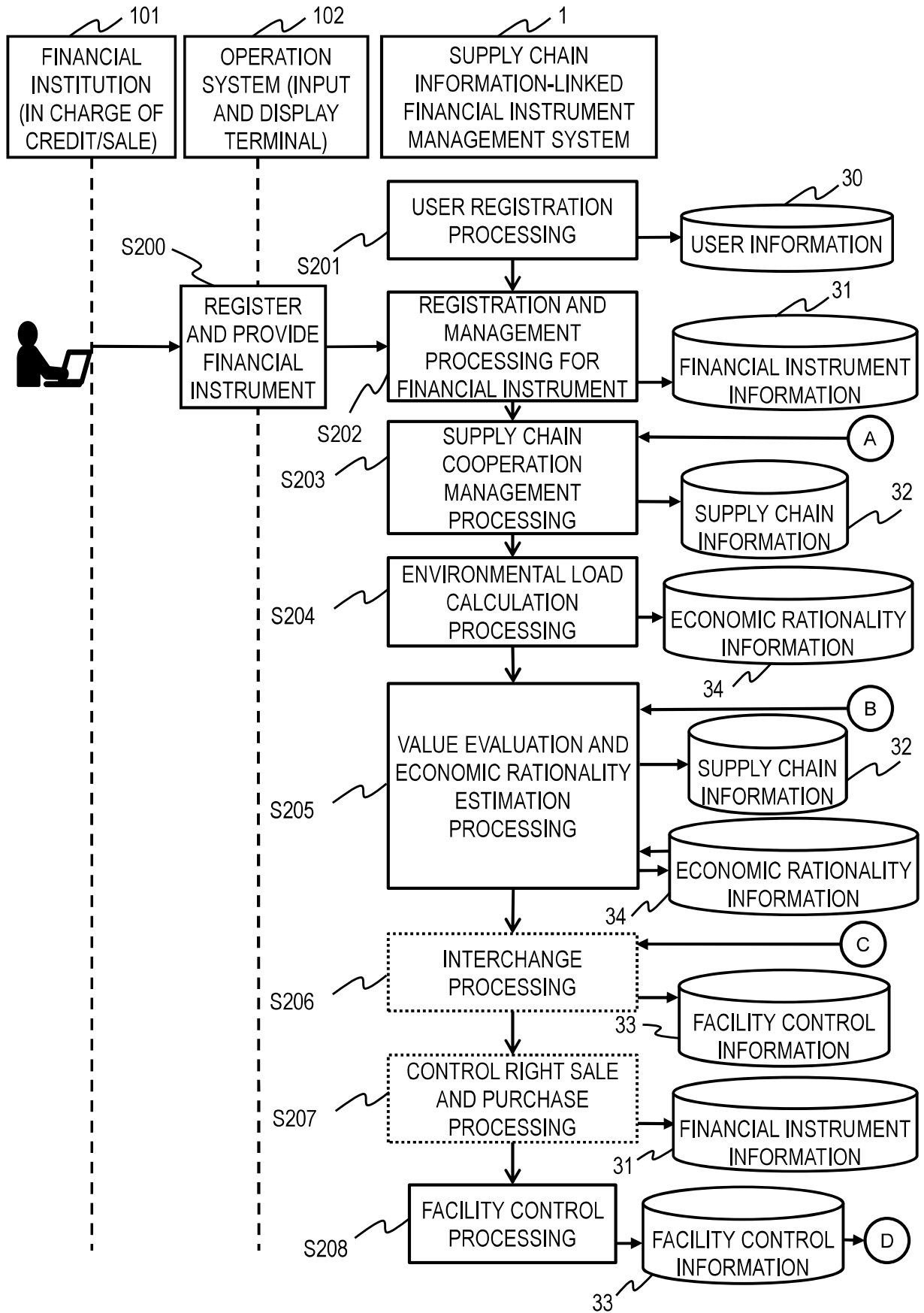
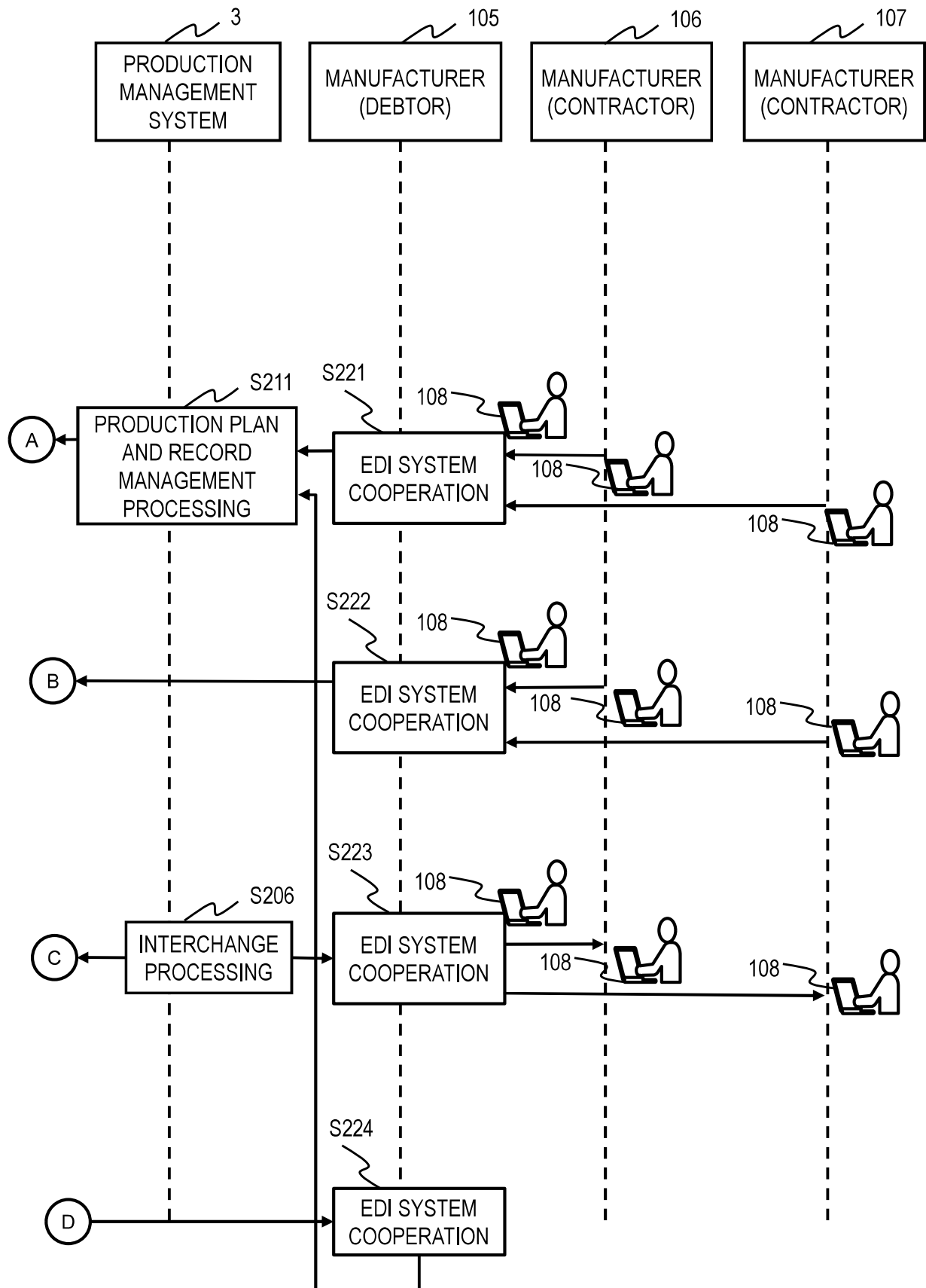
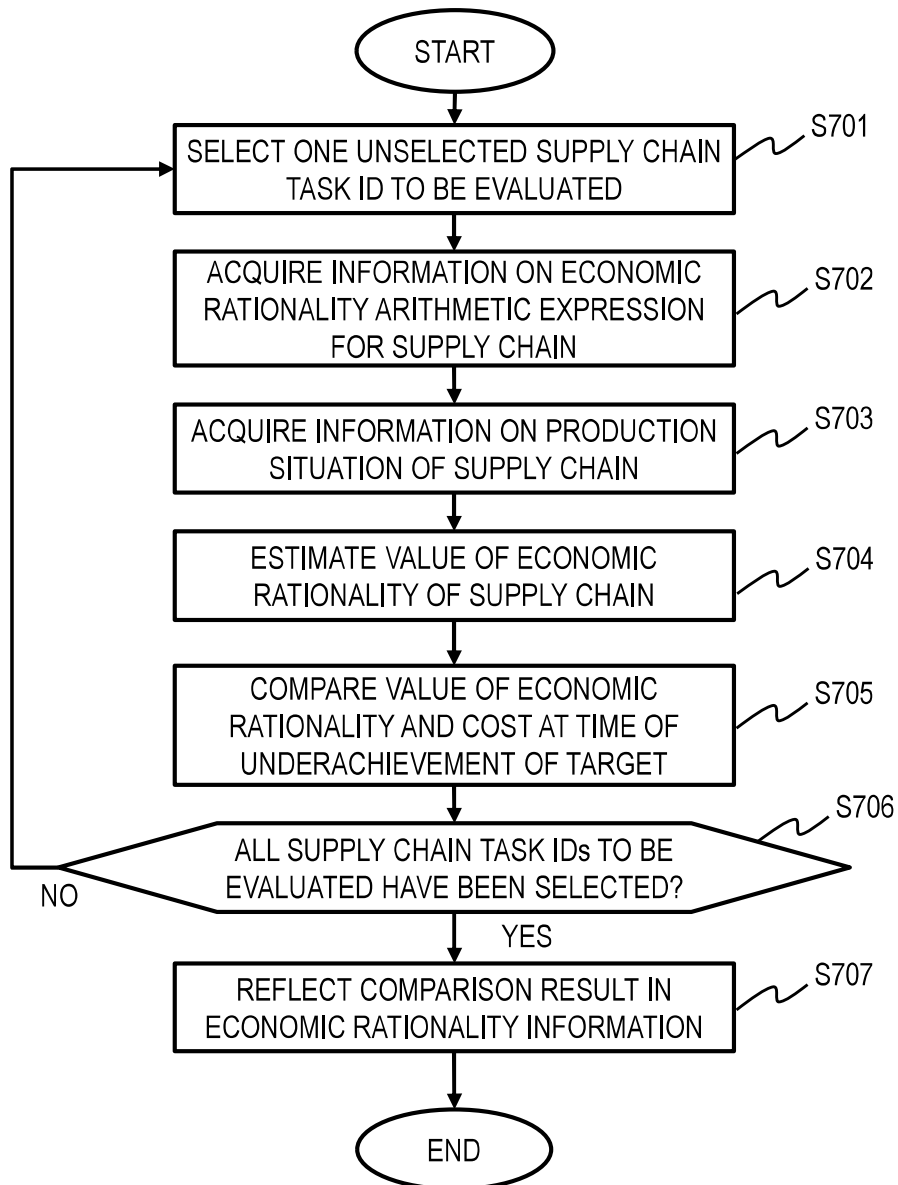
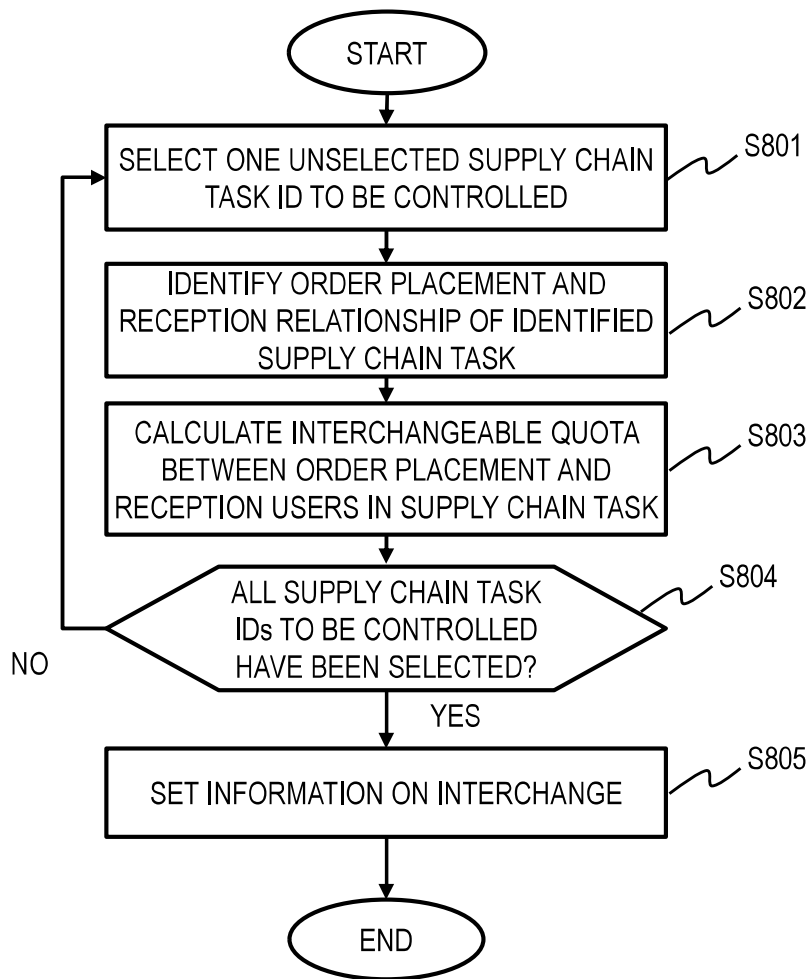


FIG. 6A

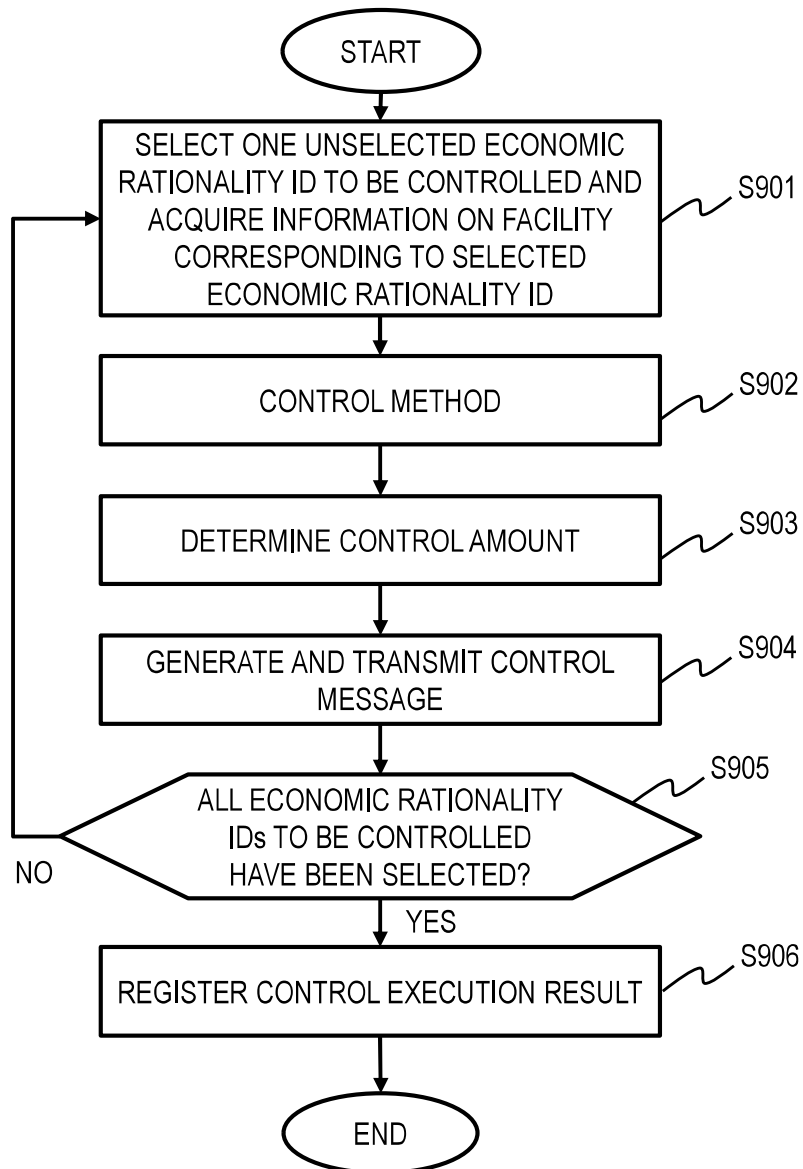
**FIG. 6B**

VALUE EVALUATION AND
ECONOMIC RATIONALITY ESTIMATION PROCESSING**FIG. 7**

INTERCHANGE PROCESSING

**FIG. 8**

FACILITY CONTROL PROCESSING

**FIG. 9**

1000

INTERCHANGE PROCESSING SCREEN

INTERCHANGE REMAINING NUMBER:
CO2 EMISSION AMOUNT 32.2kg (SUM OF ALL ITEMS (ESTIMATED VALUE))
ESTIMATED AMOUNT OF EXCESS 0.02

COMPANY NAME: SuperDrill
DEPARTMENT IN CHARGE:
ALUMINUM COMPONENT
PROCUREMENT AND
DELIVERY TASK
NAME: TANAKA
INTERCHANGE: DELIVERY
TIME SHIFT

COMPANY NAME:
SHIMIZU KAKO
DEPARTMENT IN
CHARGE:
PROCESSING
NAME: OKITA
INTERCHANGEABLE
QUOTA:0.01kg
RESPONSE: ONE
DAY TO DELIVER

COMPANY NAME:
YAMANAKA SEIREN
DEPARTMENT IN
CHARGE: WASHING
NAME: SATO
INTERCHANGEABLE
QUOTA:0.01kg
RESPONSE: BATCH
WASHING

COMPANY NAME:
ENE TOSO
DEPARTMENT IN
CHARGE: PAINTING
TASK
NAME: TADOKORO
INTERCHANGEABLE
QUOTA:0.005kg
RESPONSE: BATCH
PAINTING

COMPANY NAME:
METAL LOGISTICS
DEPARTMENT IN
CHARGE: DELIVERY
NAME: SUZUKI
INTERCHANGEABLE
QUOTA:0.1kg
RESPONSE: EV
TRUCK

REQUEST CONTENT:
2022.10.23, MONDAY, 19:30
DELIVERY DATE TO SHIMIZU KAKO: POSTPONED BY ONE DAY

EXECUTE
REQUEST

CANCEL

FIG. 10