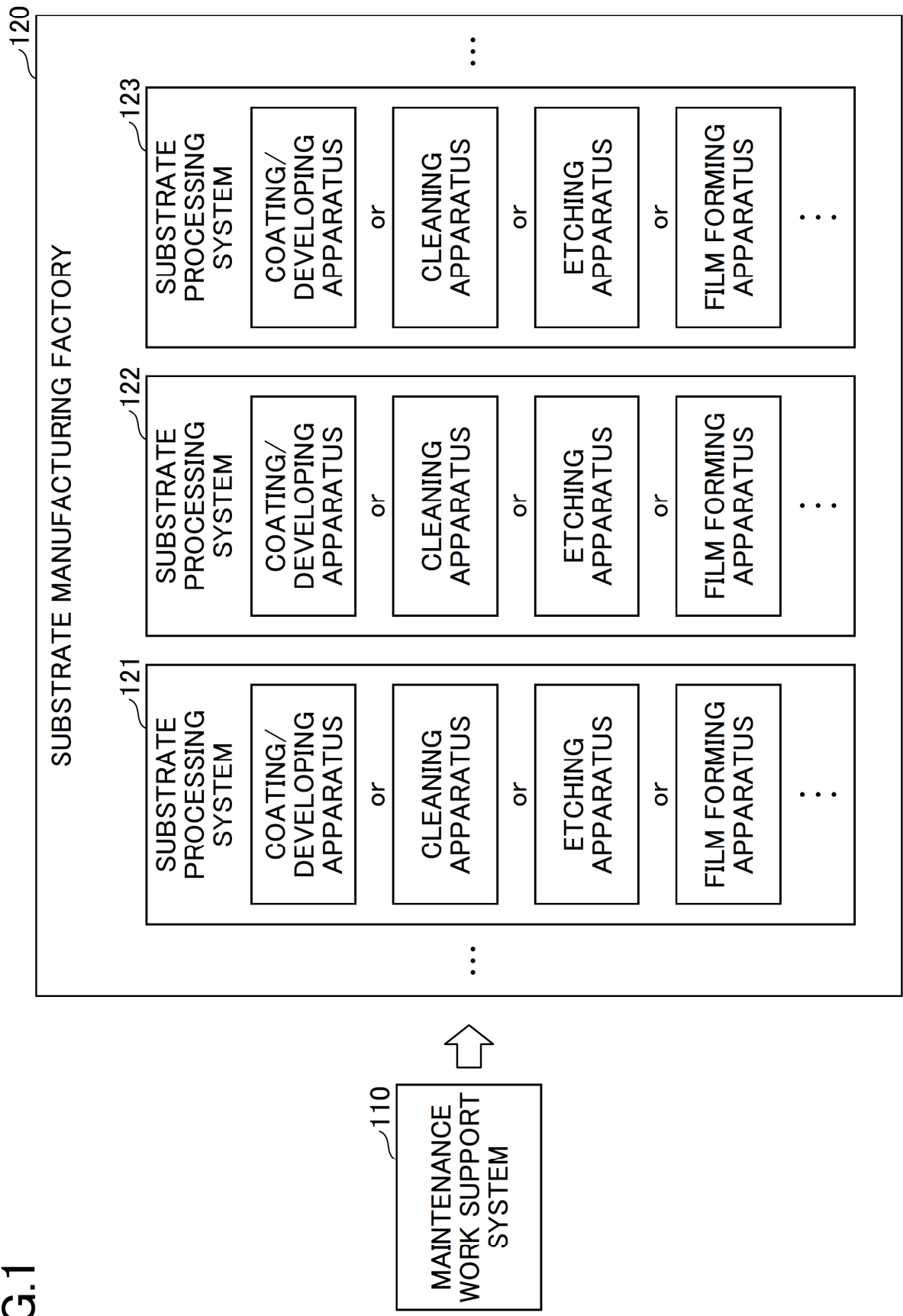


FIG.1



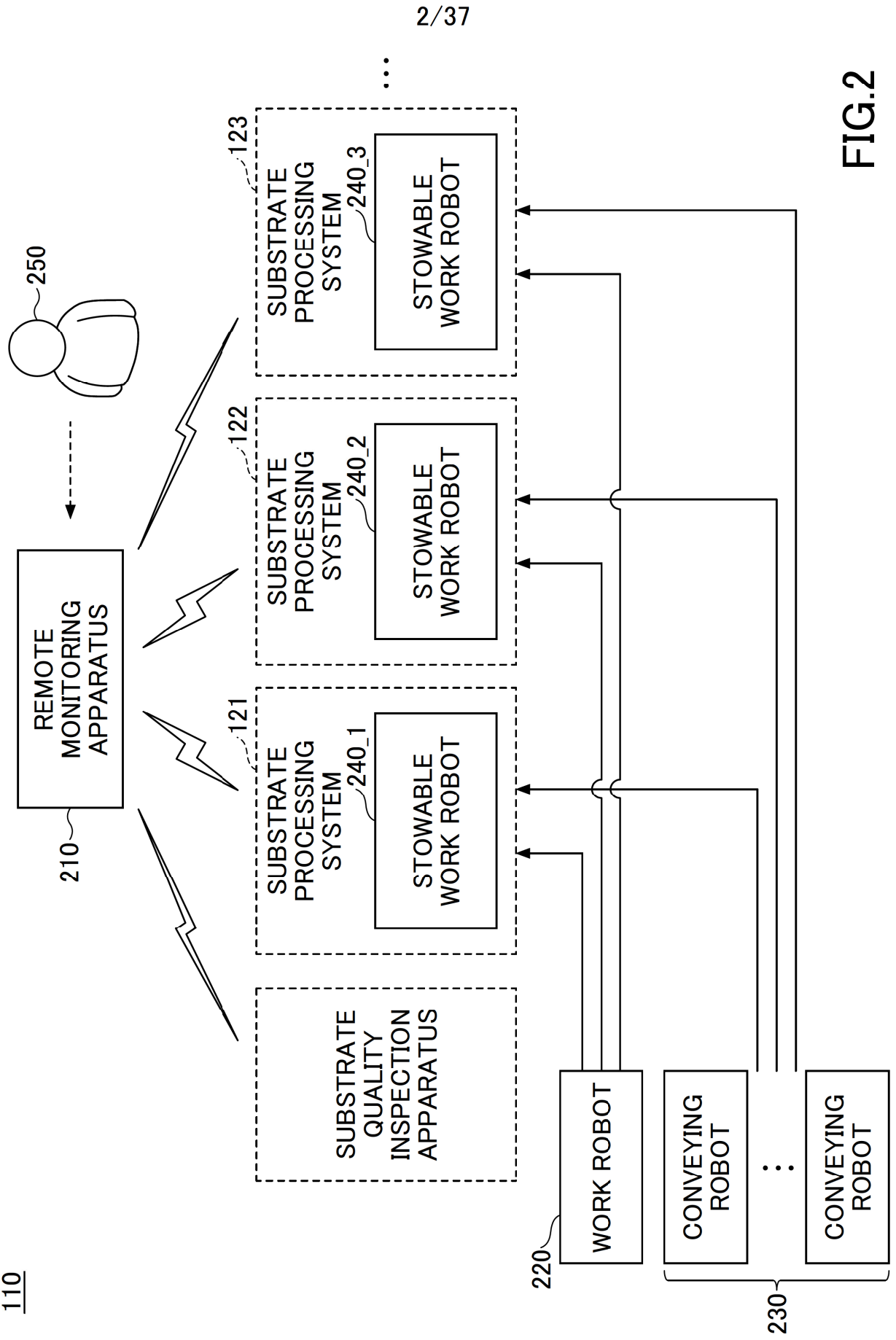


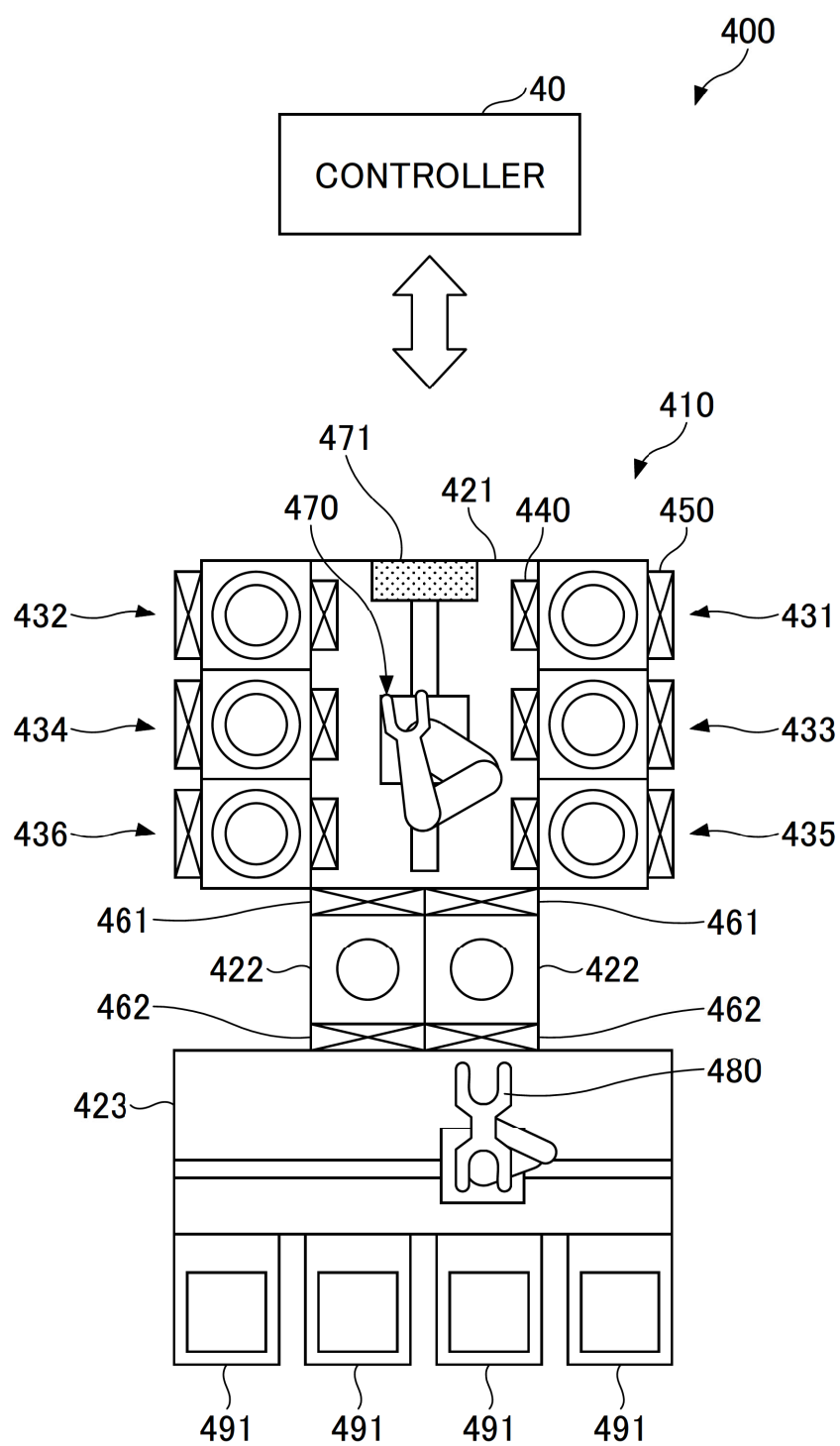
FIG.2

FIG.3

WORK ITEMS OF MAINTENANCE WORK			
WORK ITEM NO.	WORK NAME	SUBSTRATE PROCESSING SYSTEM	WORK ITEM
1	CONSUM- ABLES REPLACE- MENT	COATING/ DEVELOPING APPARATUS	RESIST BOTTLE REPLACEMENT
2		COATING/ DEVELOPING APPARATUS	FILTER REPLACEMENT
3		CLEANING APPARATUS	SPIN REPLACEMENT
4		CLEANING APPARATUS	FORK PAD REPLACEMENT
5		ETCHING APPARATUS	EDGE RING REPLACEMENT
...		...	...
101	CLEANING	ETCHING APPARATUS	CHAMBER INTERIOR CLEANING
102		ETCHING APPARATUS	VACUUM CONVEYING CHAMBER INTERIOR CLEANING
103		ETCHING APPARATUS	LOADER MODULE INTERIOR CLEANING
...		...	...

WORK ITEM OF STATE MEASUREMENT			
WORK ITEM NO.	WORK NAME	SUBSTRATE PROCESSING SYSTEM	WORK ITEM
201	STATE MEA- SUREMENT	ETCHING APPARATUS	MEASUREMENT OF EDGE RING WEARING DEGREE
202		ETCHING APPARATUS	MEASUREMENT OF AMOUNT OF DEPOSIT IN CHAMBER
...		...	...

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FIG.4



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FIG.5

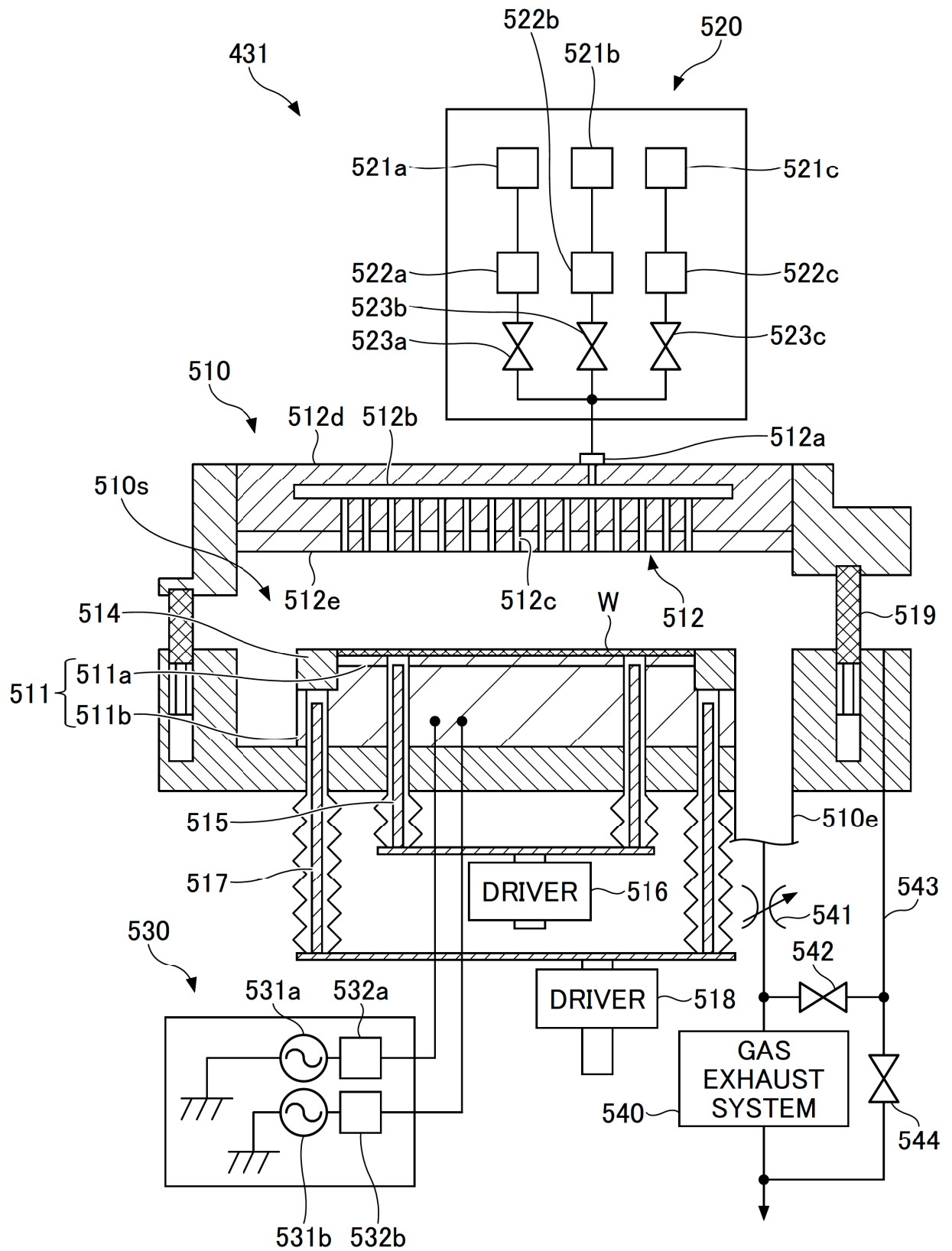


FIG.6

WORK QUALITY MEASUREMENT ITEMS				
WORK ITEM NO.	WORK NAME	MEASUREMENT ITEM	CRITERION	
5	CONSUMABLES REPLACEMENT	POSITION OF EDGE RING	DEVIATION OF CENTER COORDINATES OF EDGE RING POSITION IS WITHIN PREDETERMINED COORDINATES	
...		...	...	
101	CLEANING	SIDE WALL IN CHAMBER	NUMBER OF PARTICLES IS $\leq$ CRITERIAL NUMBER	
102		SIDE WALL IN VACUUM CONVEYING CHAMBER	NUMBER OF PARTICLES IS $\leq$ CRITERIAL NUMBER	
...		...	...	

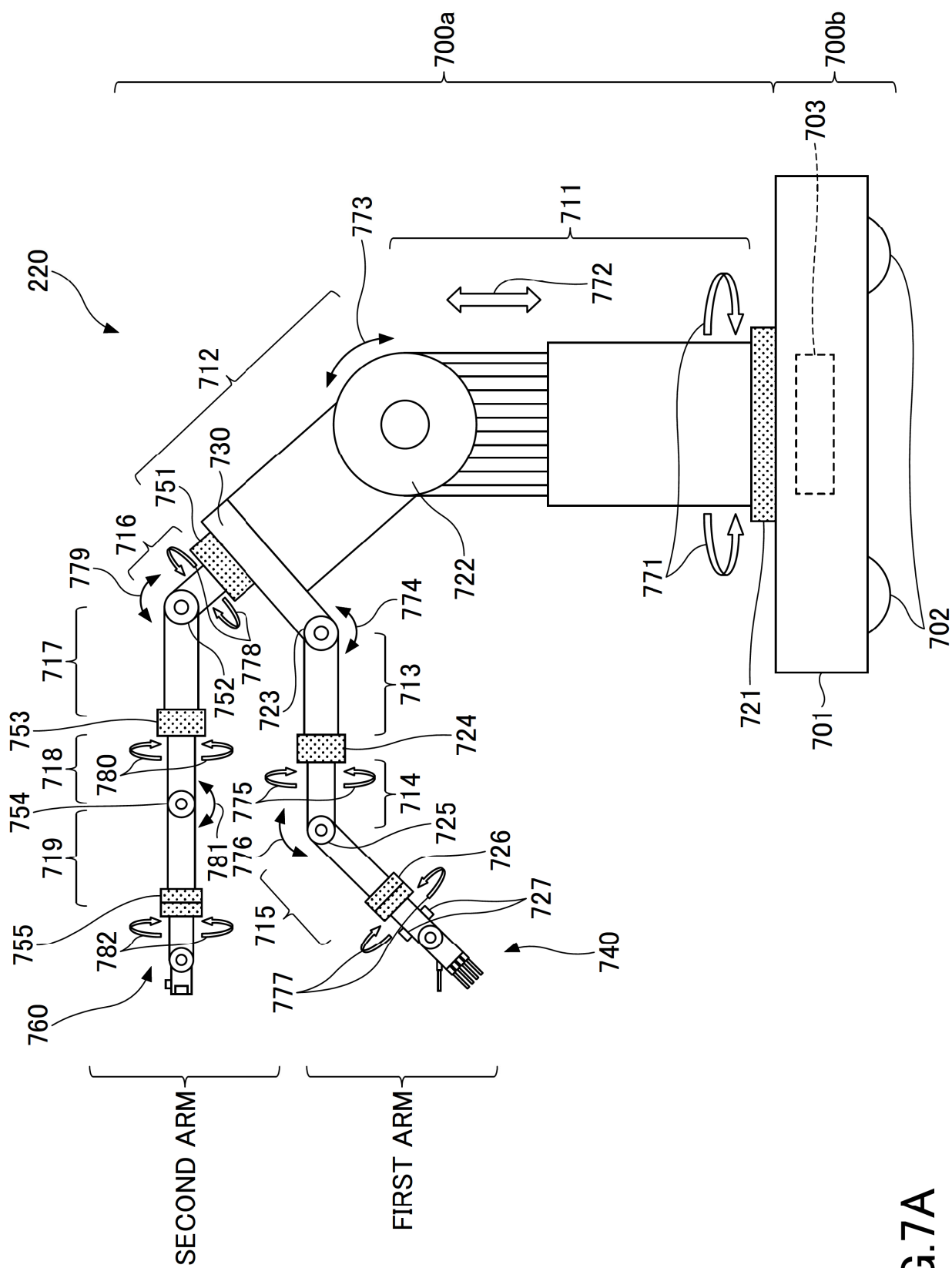
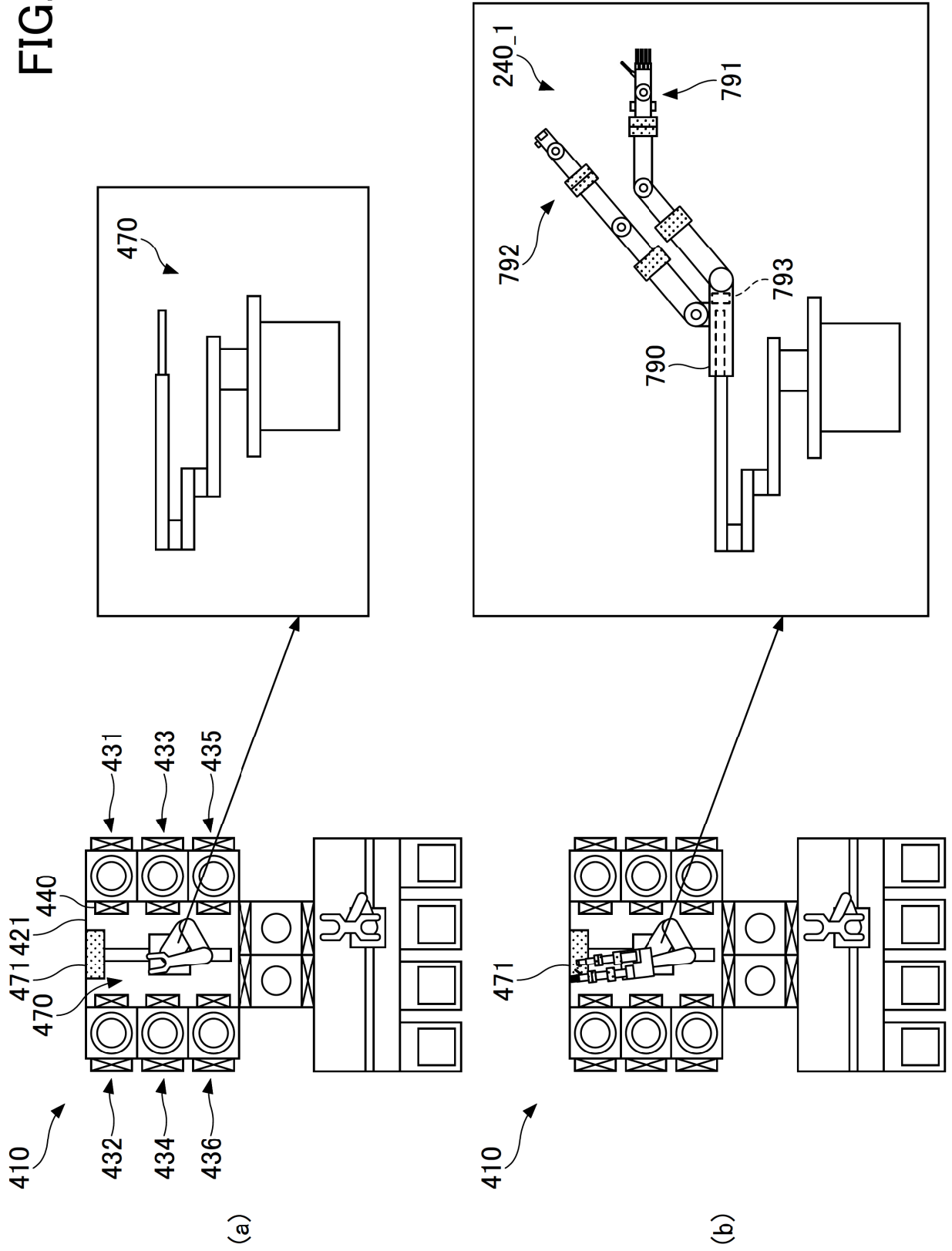


FIG. 7A

FIG. 7B



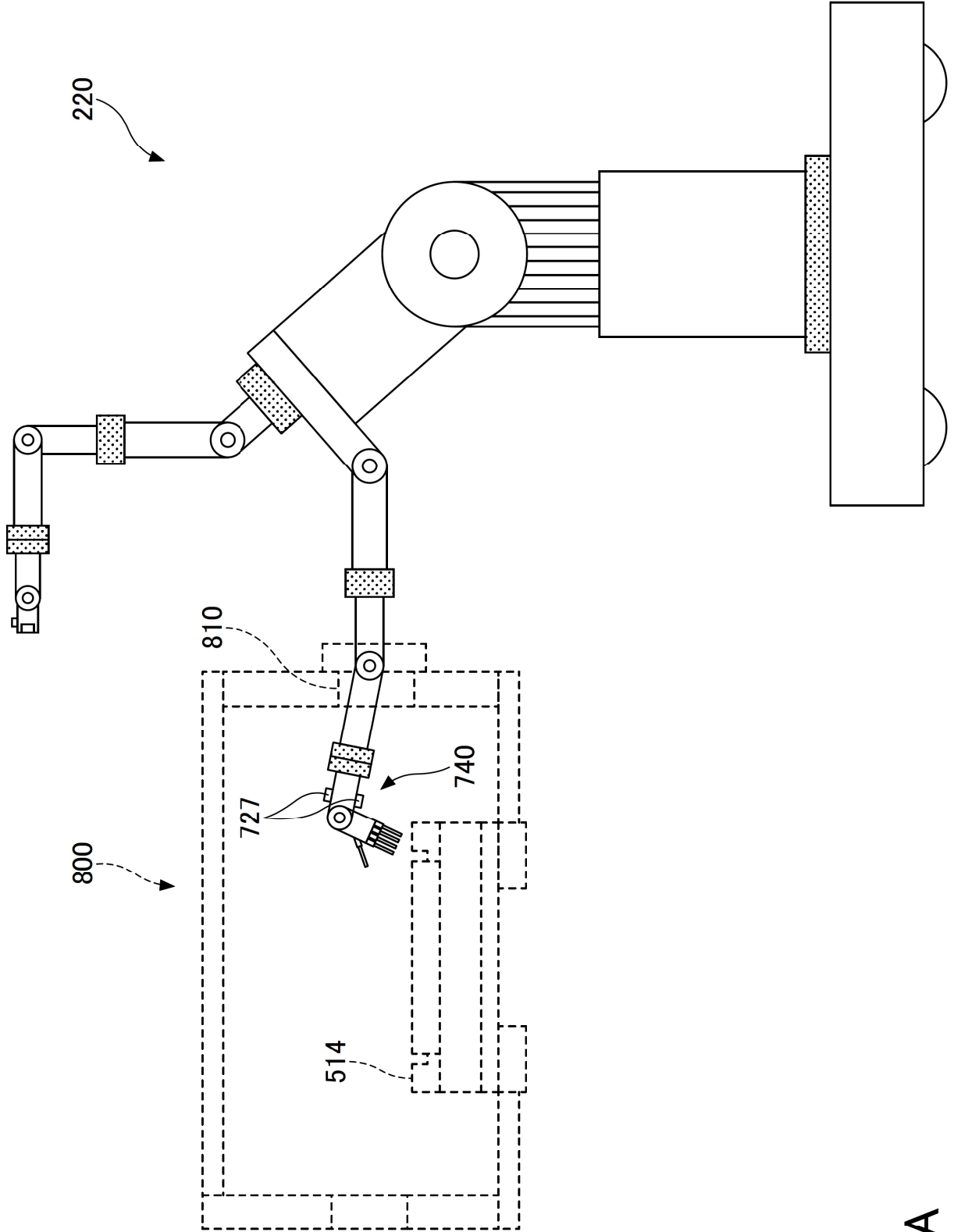
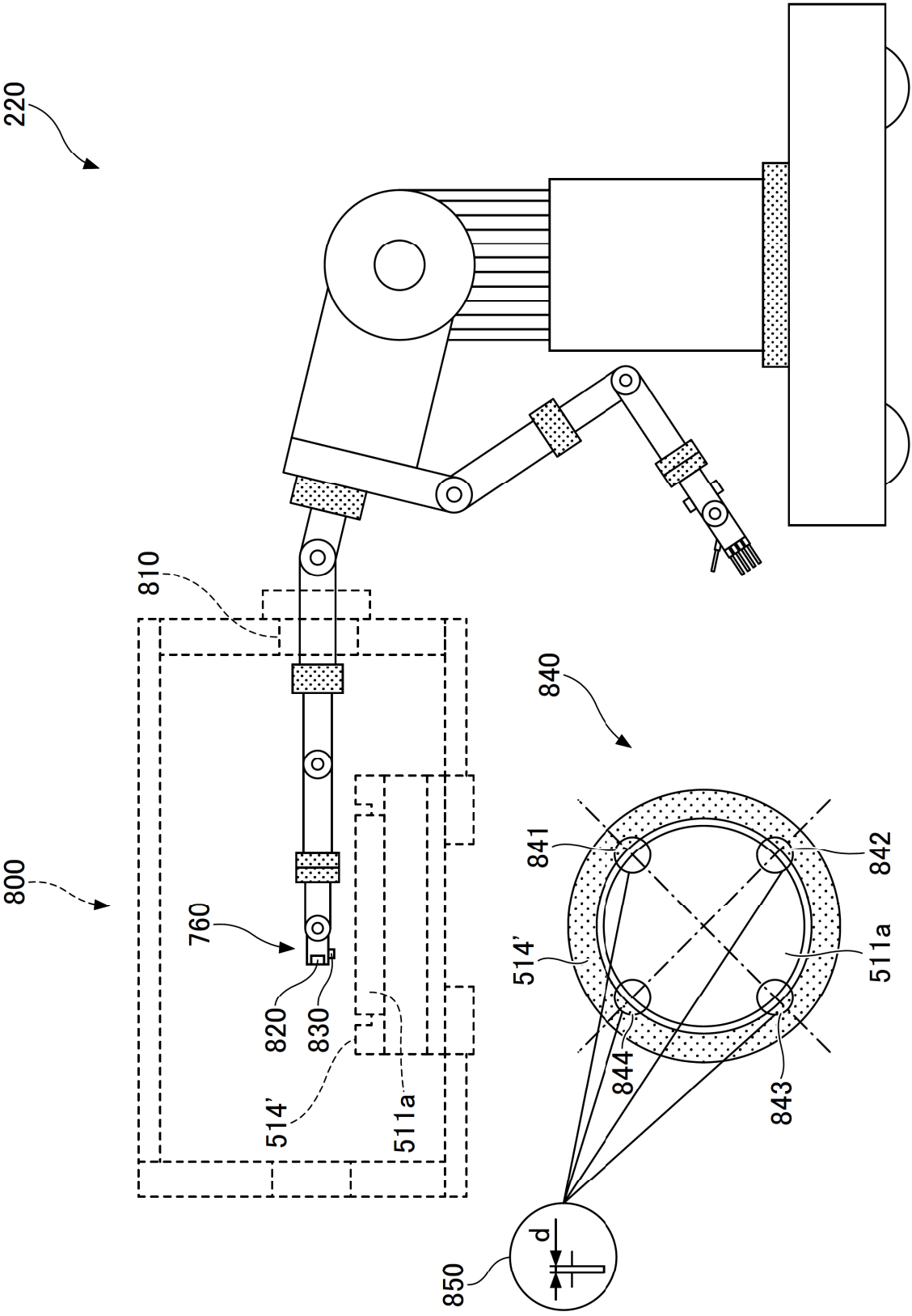


FIG.8A

FIG.8B



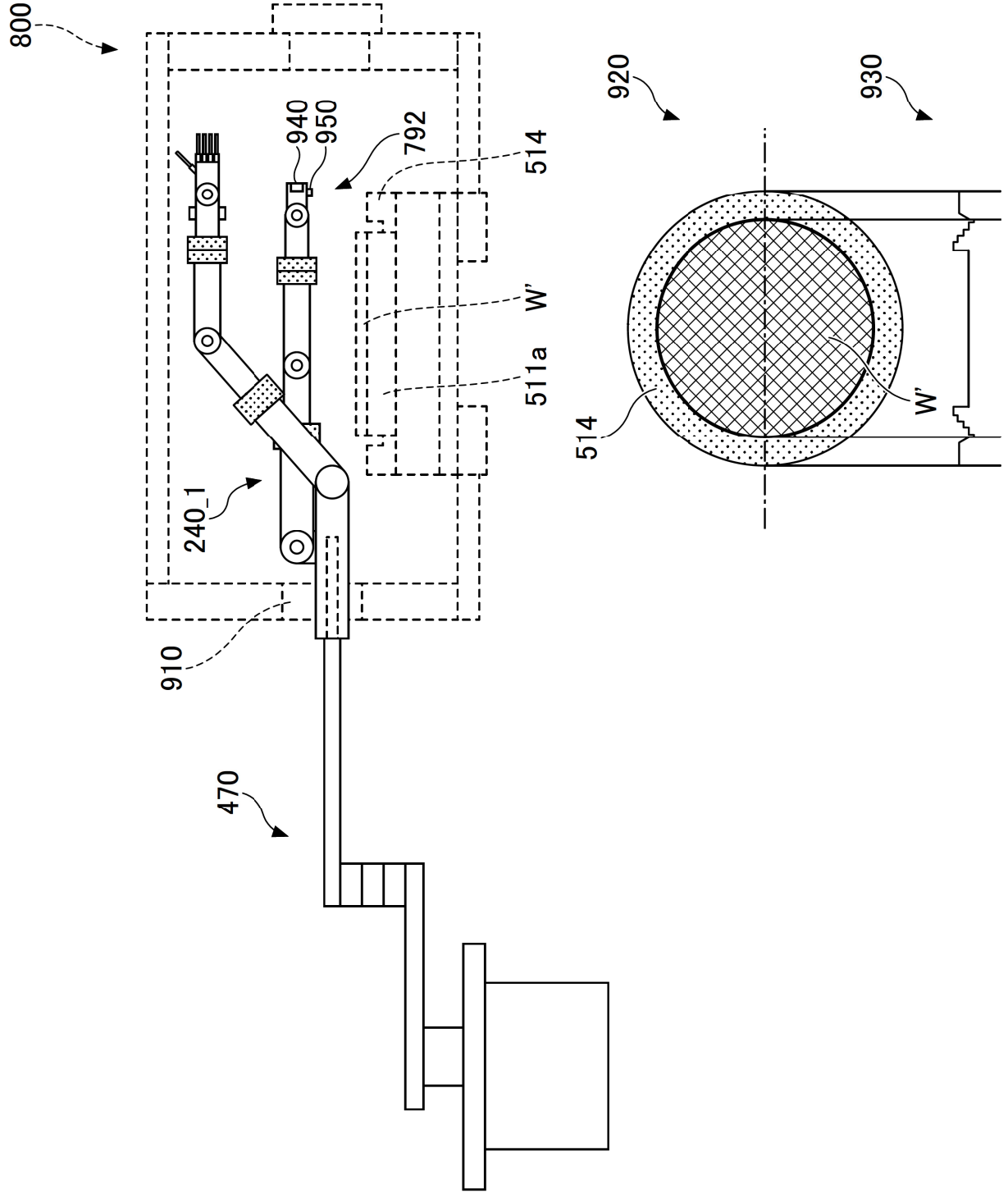


FIG. 9A

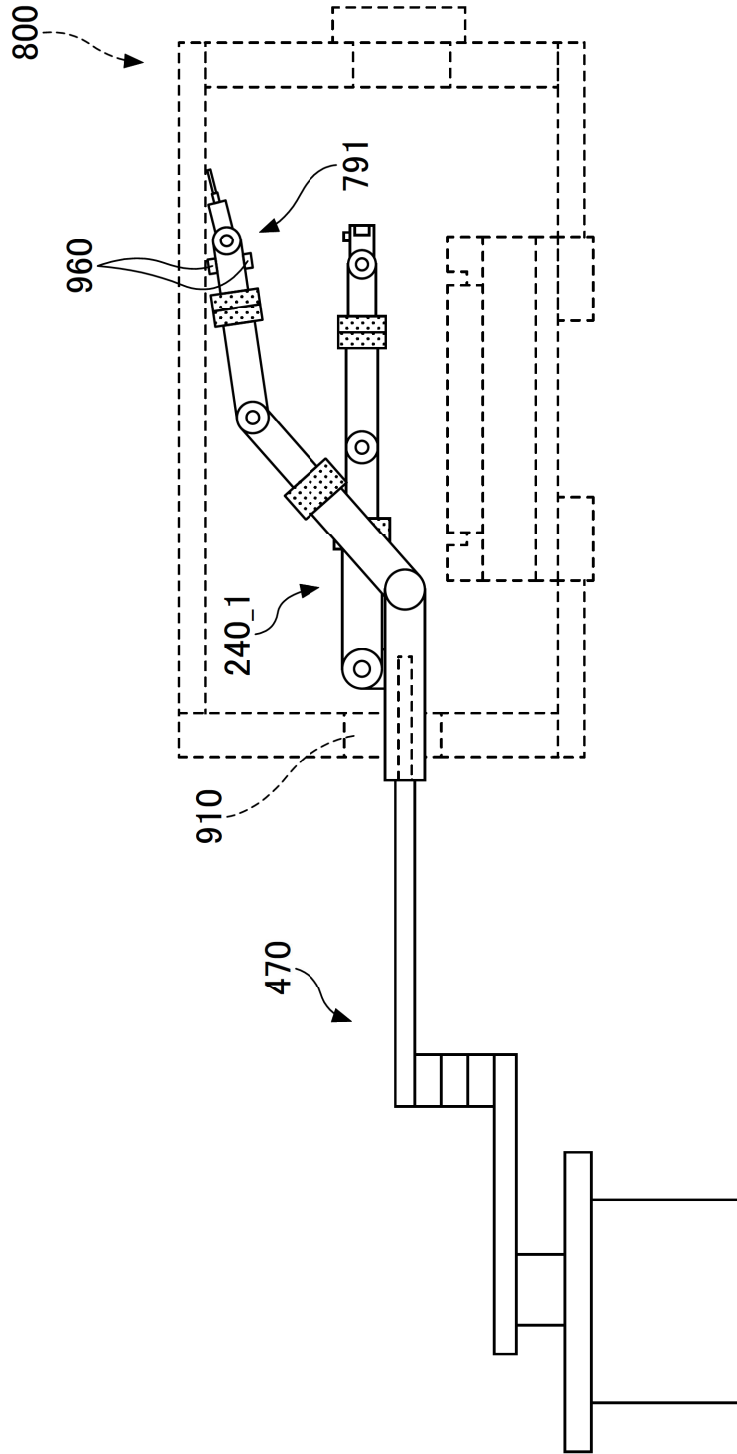


FIG. 9B

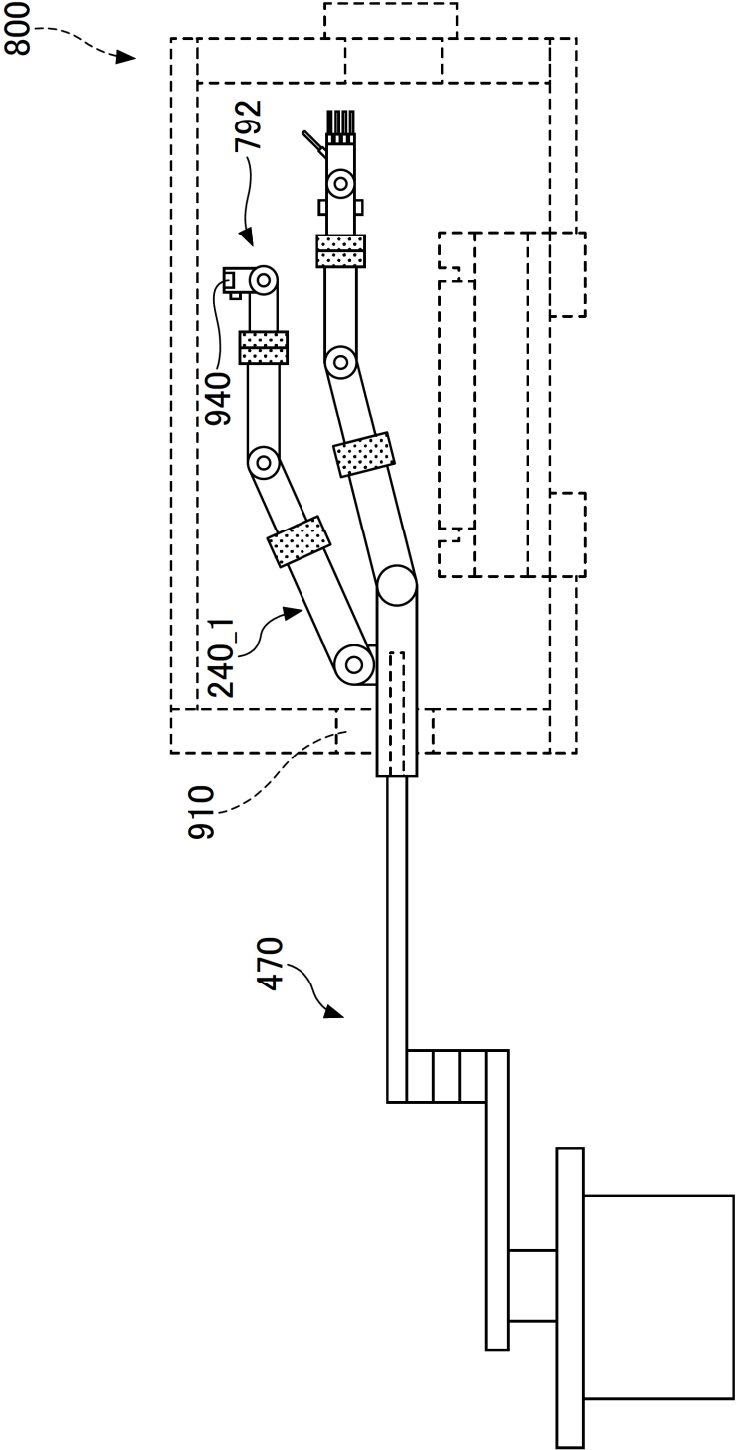


FIG. 9C

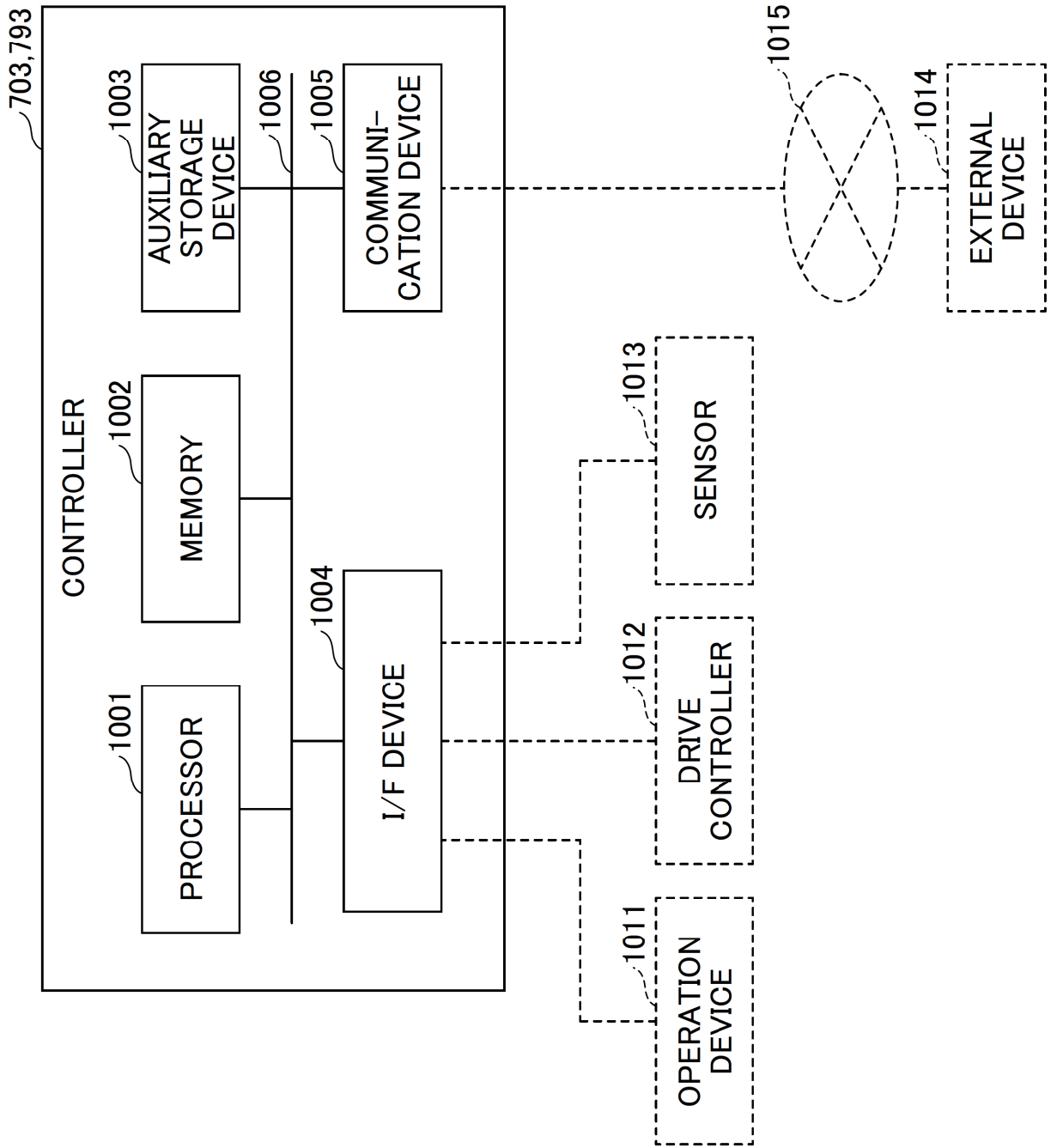


FIG.10

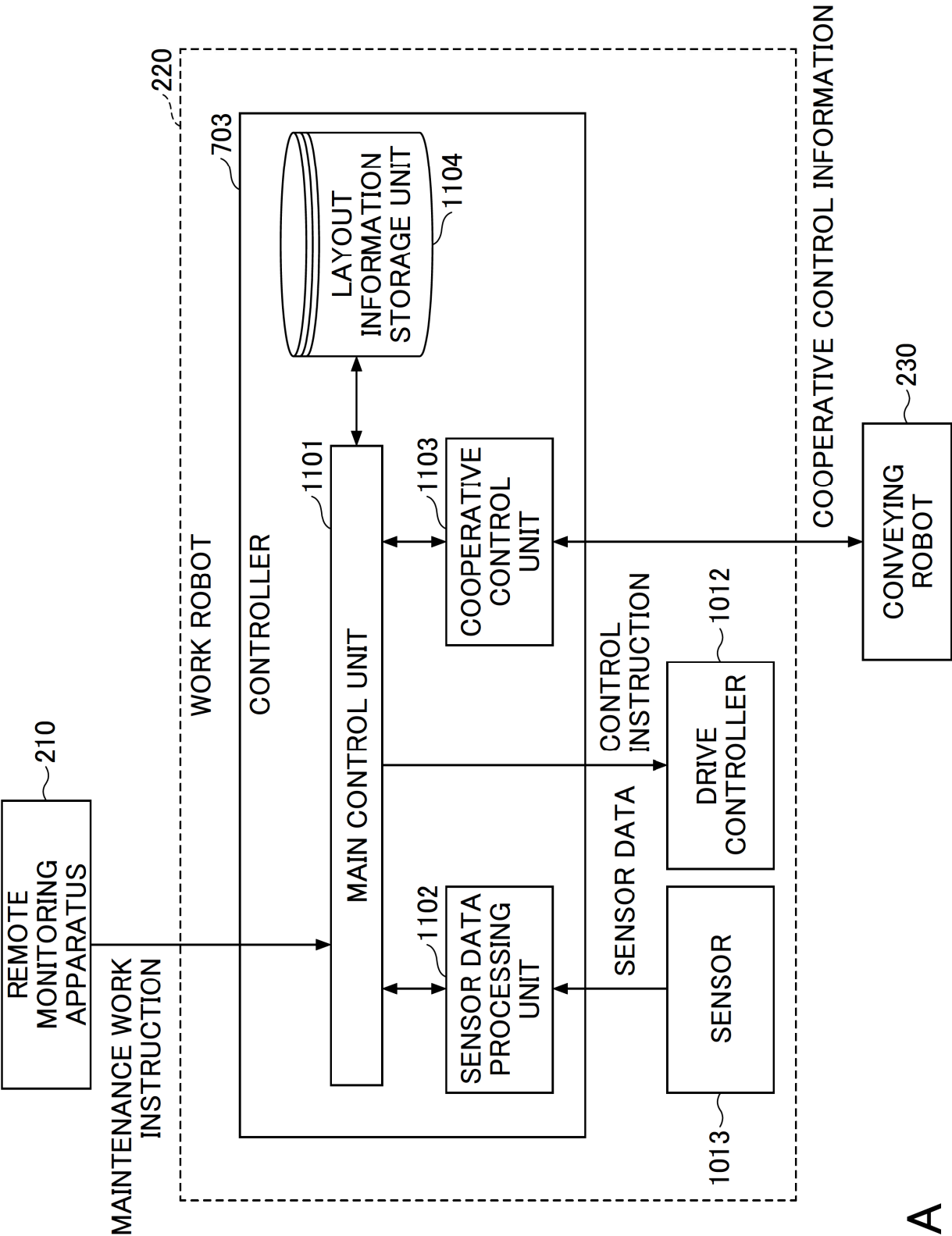


FIG.11A

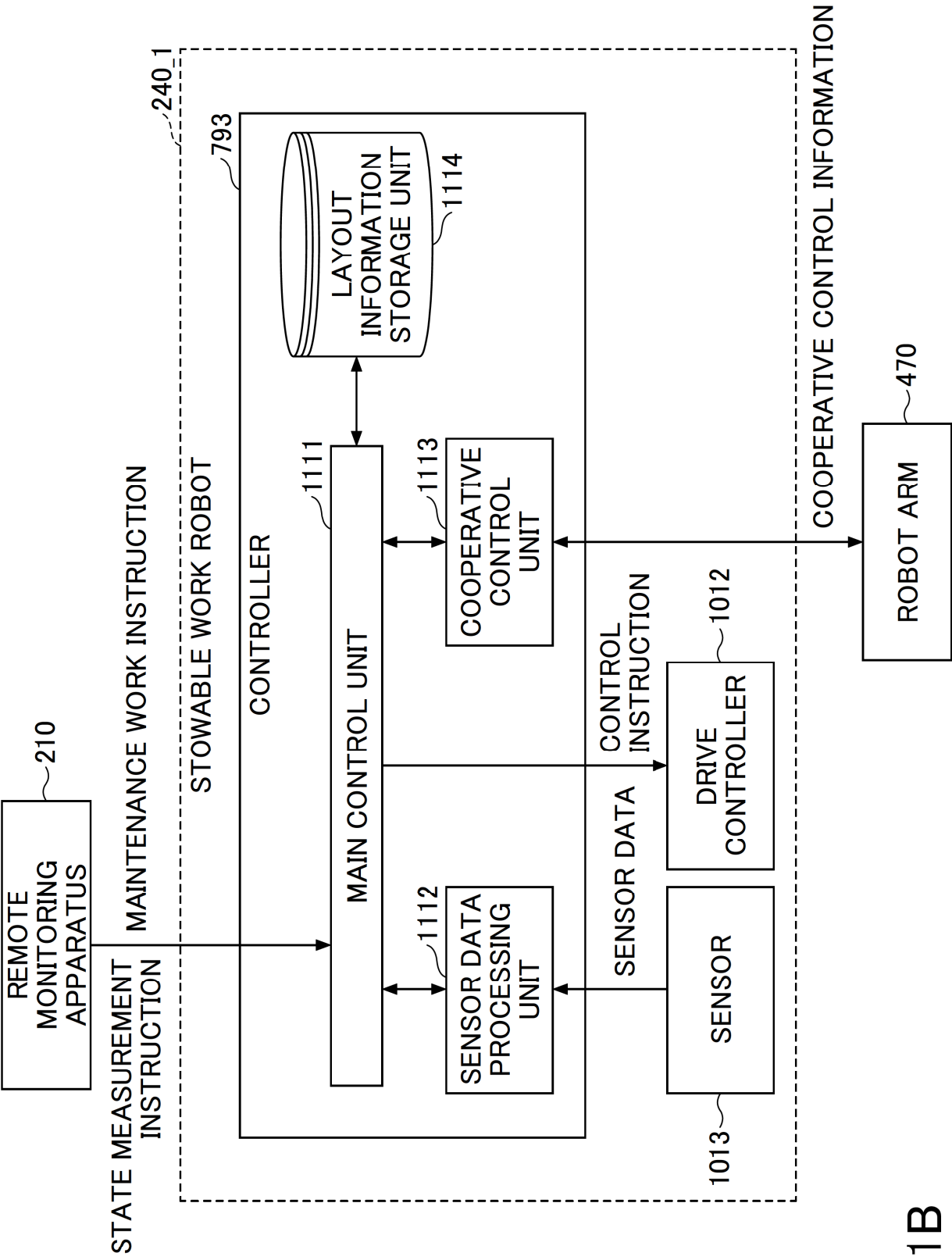


FIG.11B

FIG.11C

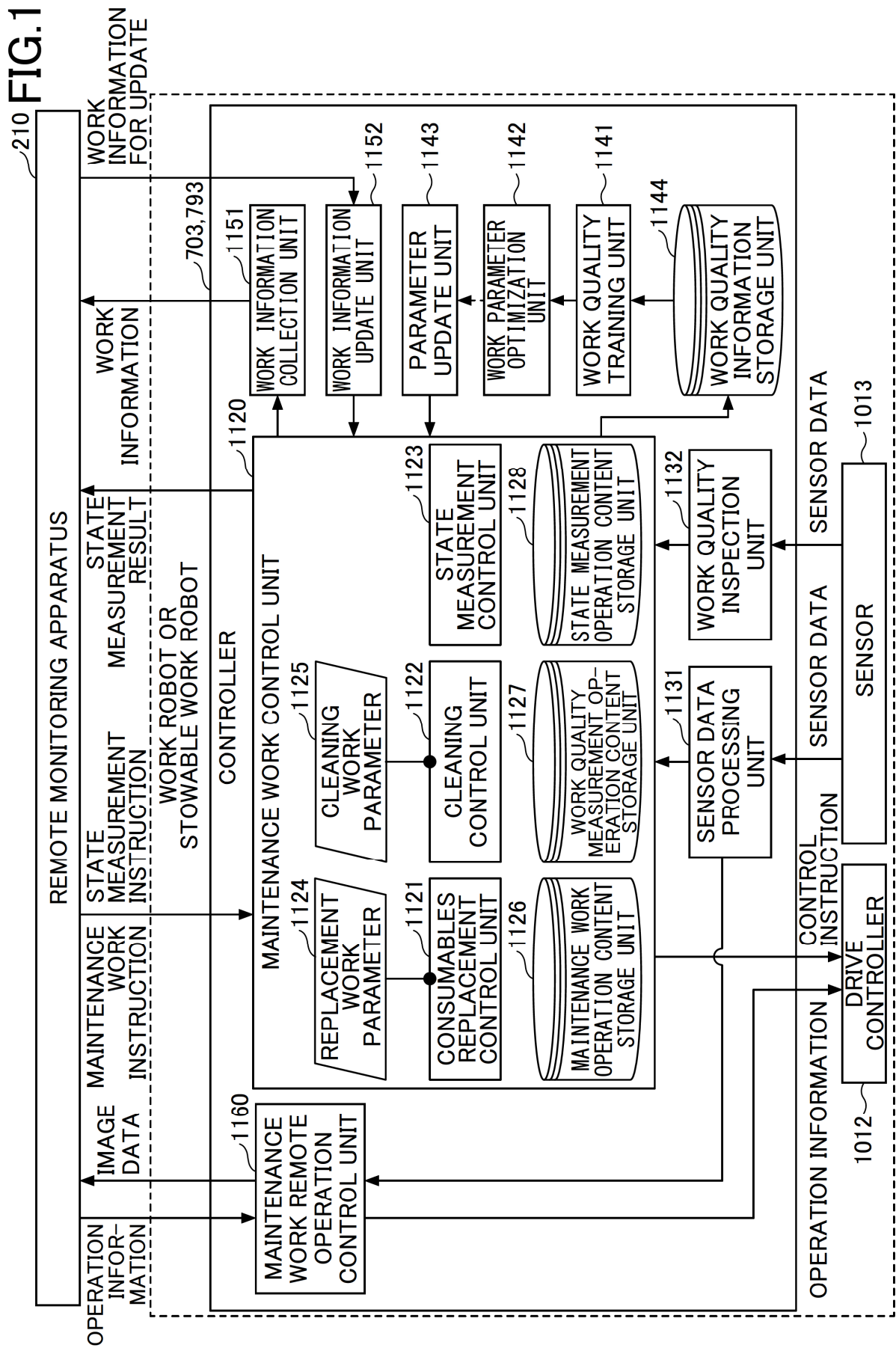
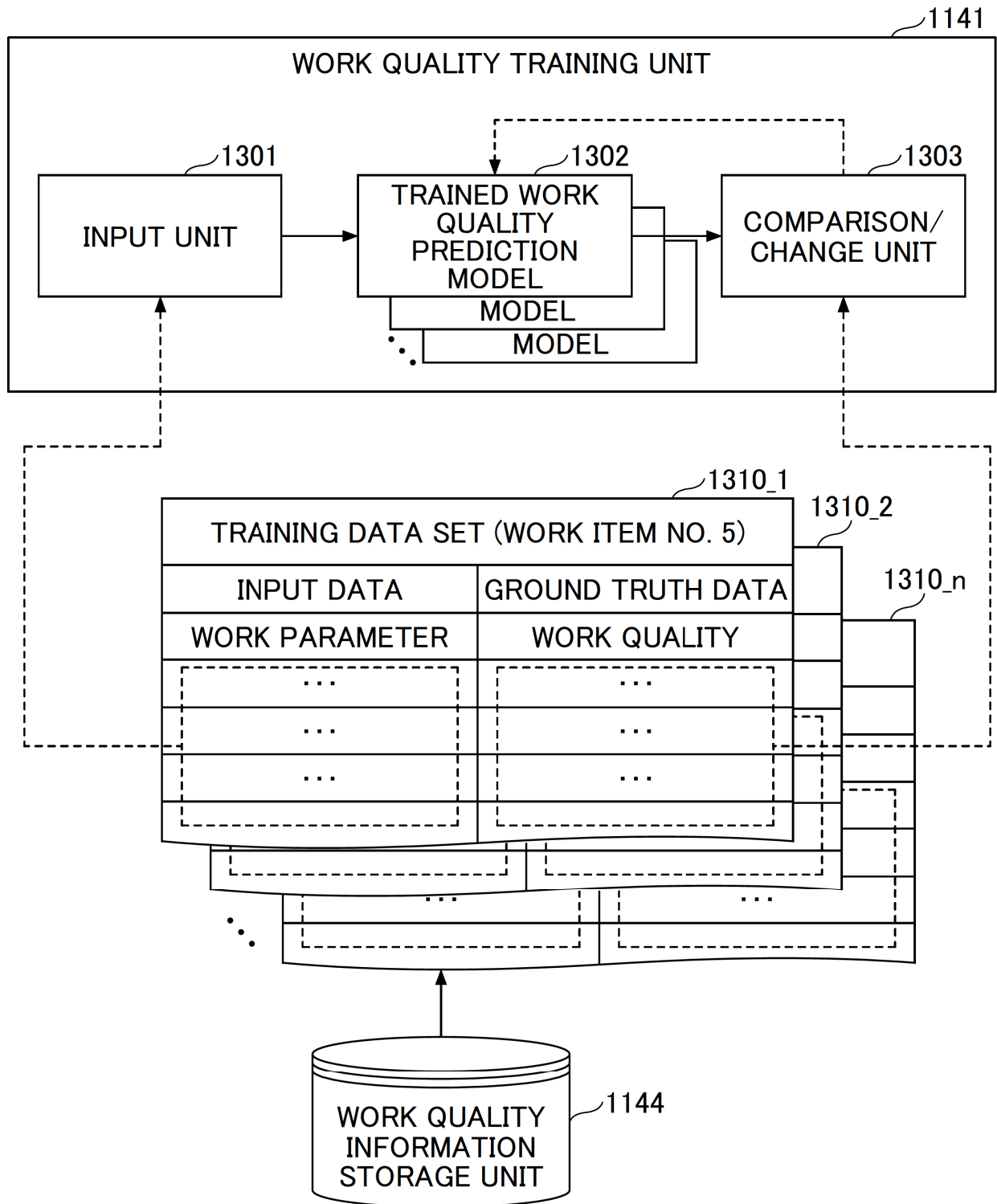


FIG.12

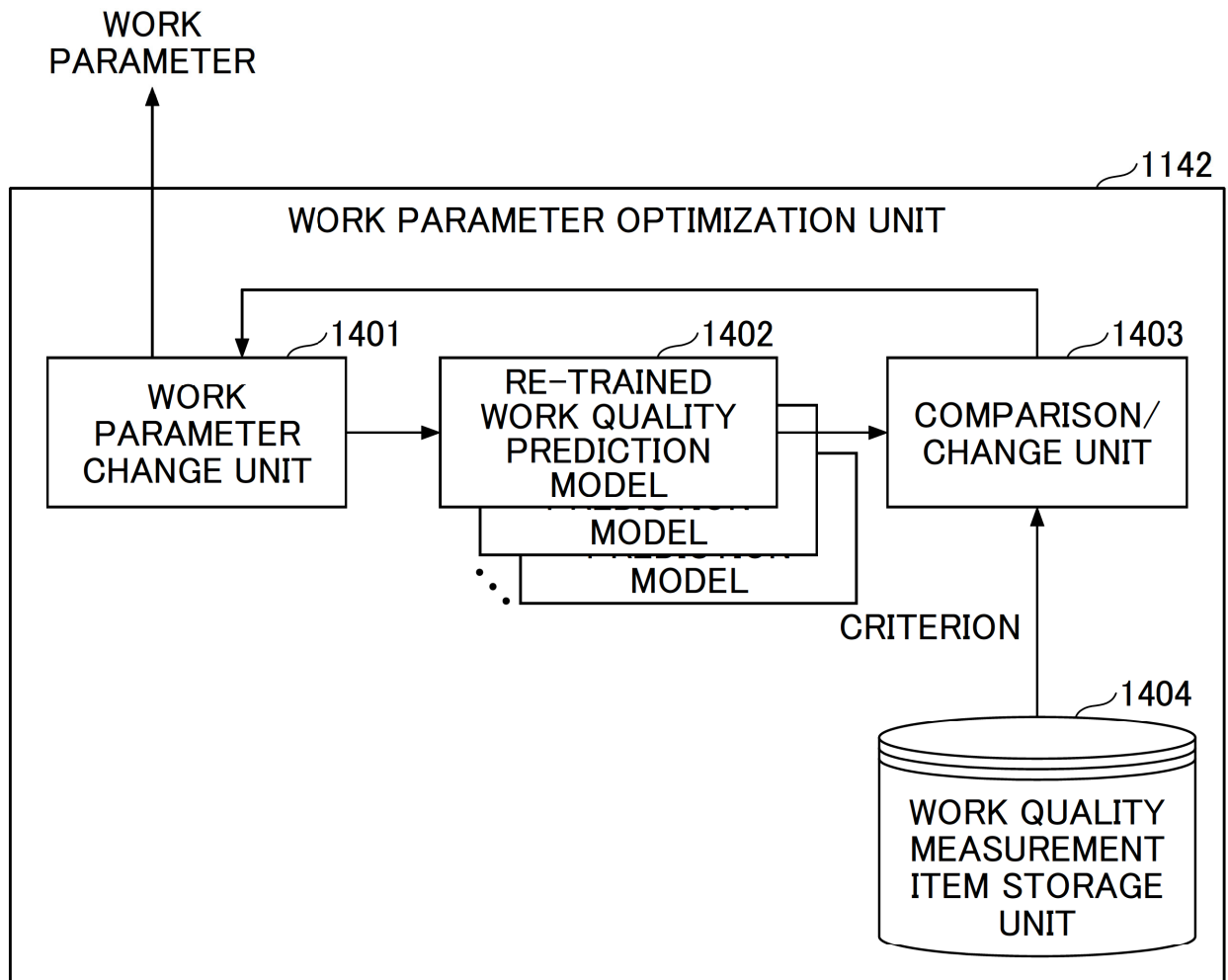
1200

WORK QUALITY INFORMATION				
WORK ITEM NO.	WORK ITEM	WORK PARAMETER	WORK QUALITY	
5	EDGE RING REPLACEMENT	REPLACEMENT WORK PARAMETER FOR EDGE RING REPLACEMENT	COORDINATES OF EDGE RING INSTALLATION POSITION	
101	CHAMBER INTERIOR CLEANING	CLEANING WORK PARAMETER FOR CHAMBER INTERIOR CLEANING	NUMBER OF PARTICLES	
102	VACUUM CONVEYING CHAMBER INTERIOR CLEANING	CLEANING WORK PARAMETER FOR VACUUM CONVEYING CHAMBER INTERIOR CLEANING	NUMBER OF PARTICLES	
...	...	...	...	

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FIG.13



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FIG.14



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FIG.15

WORK INFORMATION (SUBSTRATE PROCESSING SYSTEM 1)	
WORK ITEM NO.	CONTENT OF OPERATION
101	·SETTING OF CLEANING WORK PARAMETER ·TRAVEL TO CLEANING REGION 1 ·CLEANING OPERATION 1→CLEANING OPERATION 2→CLEANING OPERATION 3 · · · ·TRAVEL TO CLEANING REGION m ·CLEANING OPERATION 1→CLEANING OPERATION 2→CLEANING OPERATION 3 ·WORK QUALITY MEASUREMENT
...	...

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FIG.16

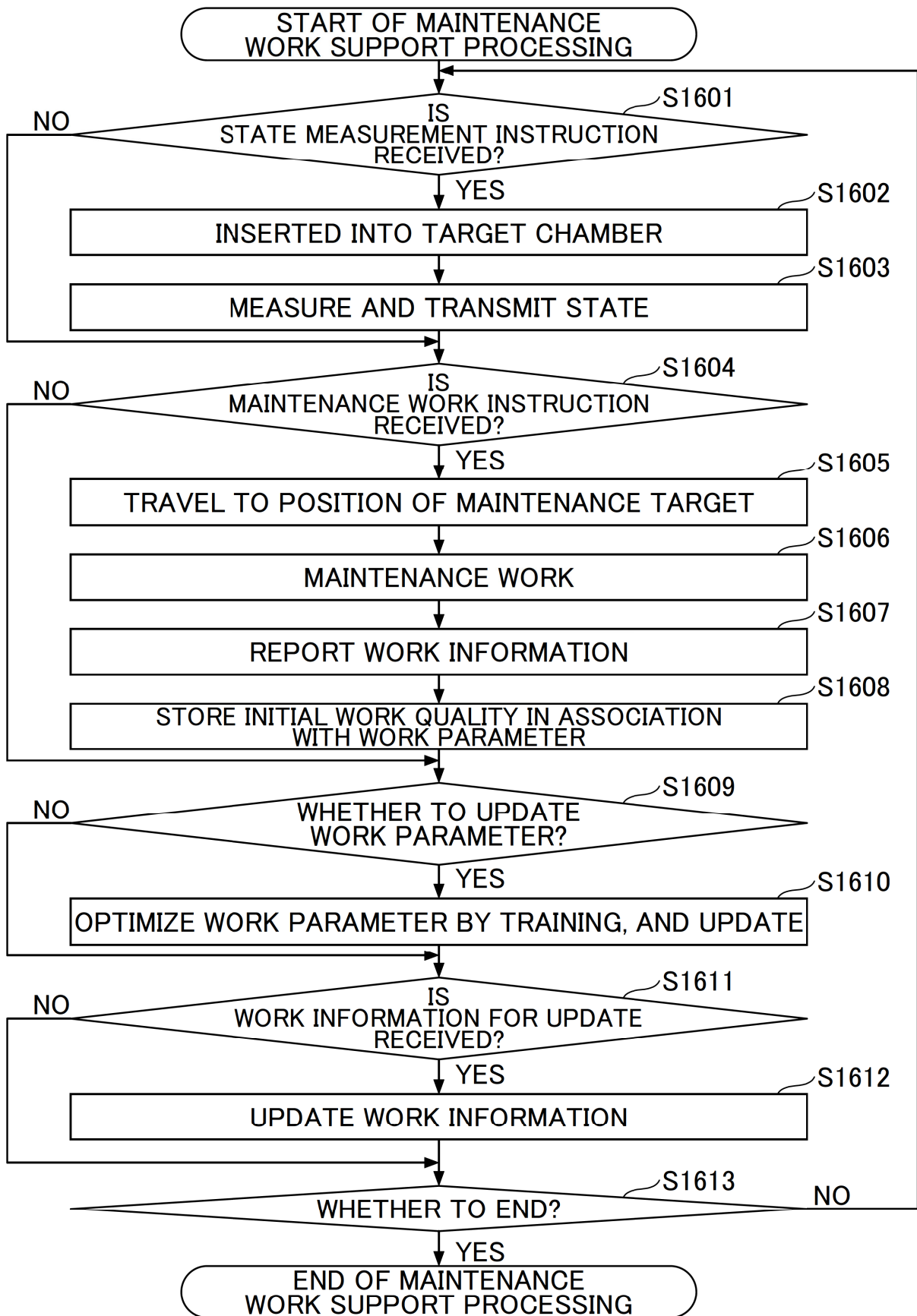


FIG.17A

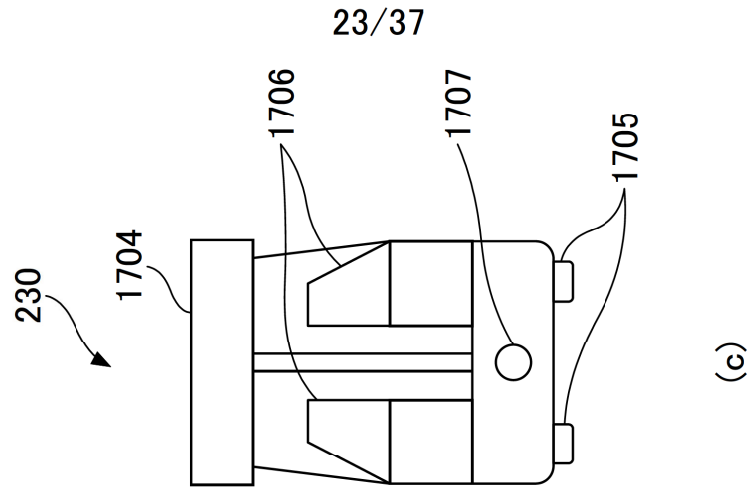
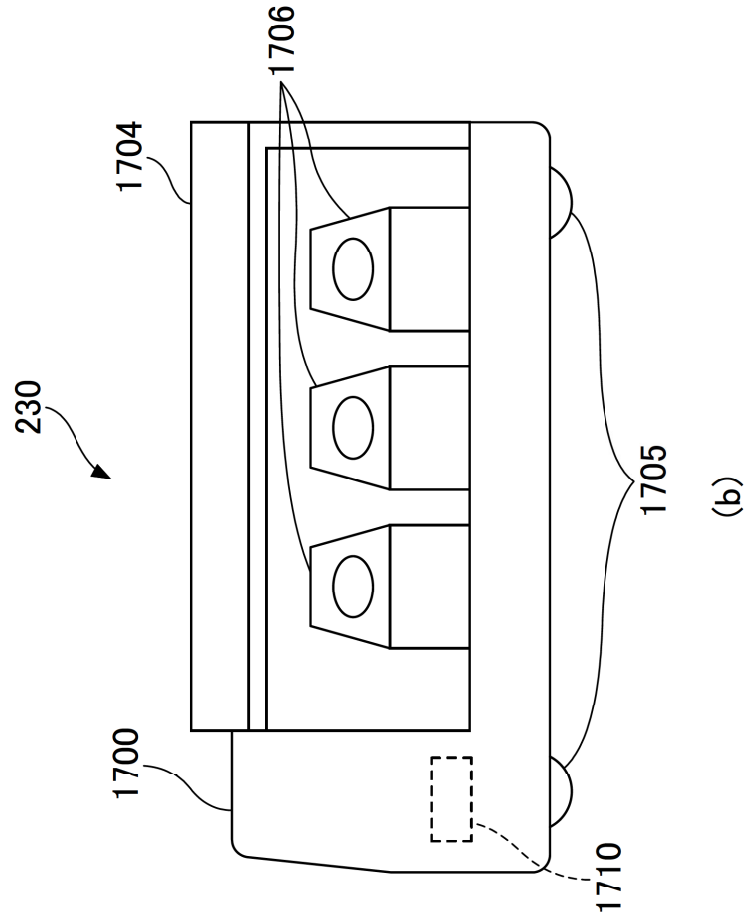
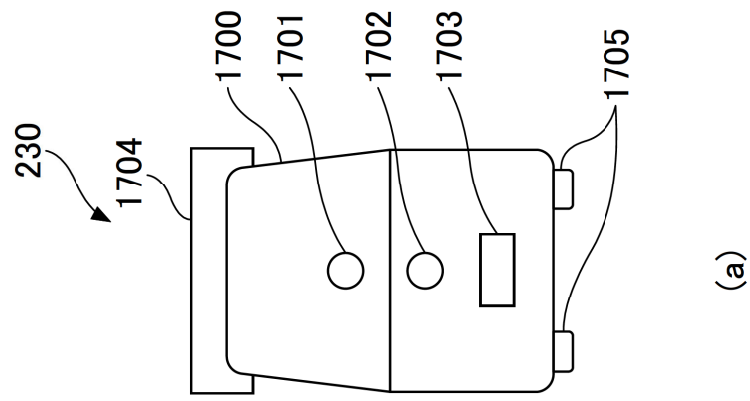
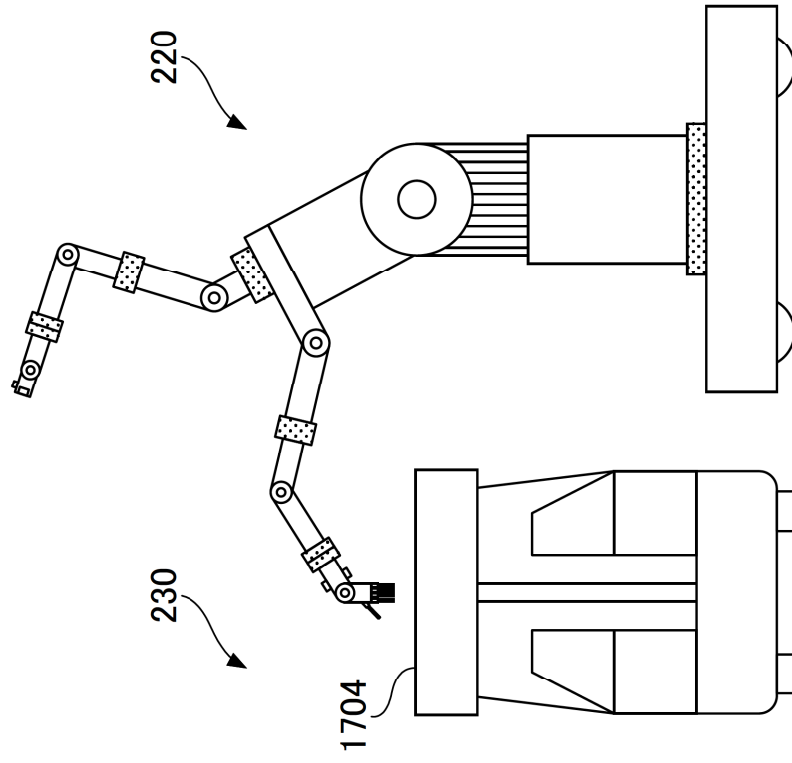
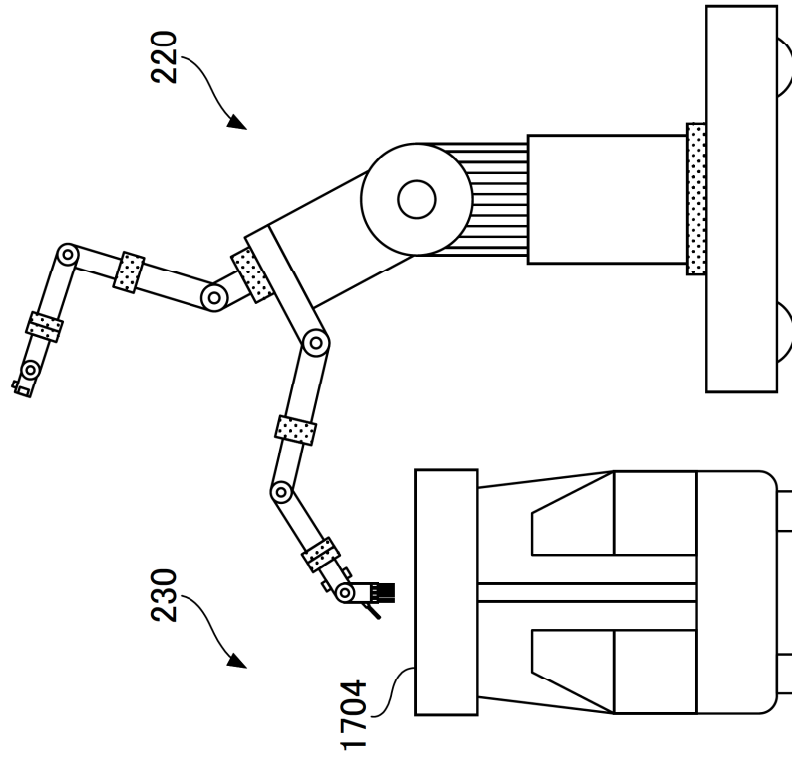


FIG.17B



(a)



(b)

FIG.18

WORK ITEMS OF MAINTENANCE WORK				NECESSARY PARTS	
WORK ITEM NO.	WORK NAME	SUBSTRATE PROCESSING SYSTEM	WORK ITEM	PARTS	END EFFECTOR
1	CONSUM- ABLES REPLACE- MENT	COATING/ DEVELOPING APPARATUS	RESIST BOTTLE REPLACEMENT	RESIST BOTTLE	VACUUM GRIPPER (TWO FINGERS) VACUUM GRIPPER (THREE FINGERS) CLAMP SUCTION HAND TOOL CHANGER . . .
2		COATING/ DEVELOPING APPARATUS	FILTER REPLACEMENT	FILTER	
3		CLEANING APPARATUS	SPIN REPLACEMENT	SPIN	
4		CLEANING APPARATUS	FORK PAD REPLACEMENT	FORK PAD	
5		ETCHING APPARATUS	EDGE RING REPLACEMENT	EDGE RING	
...		...	...	...	
101	CLEANING	ETCHING APPARATUS	CHAMBER INTERIOR CLEANING	WET CLOTH DRY CLOTH CLEANING SOLUTION . . .	END EFFECTOR FOR CLEANING SUCTION MACHINE HIGH-PRESSURE CLEANER BRUSH CO ₂ DISPENSER DRY ICE GUN . . .
102		ETCHING APPARATUS	PROCESSING CHAMBER INTERIOR CLEANING		
103		ETCHING APPARATUS	VACUUM CONVEYING CHAMBER INTERIOR CLEANING		
104		ETCHING APPARATUS	LOADER MODULE INTERIOR CLEANING		
...		...	...		

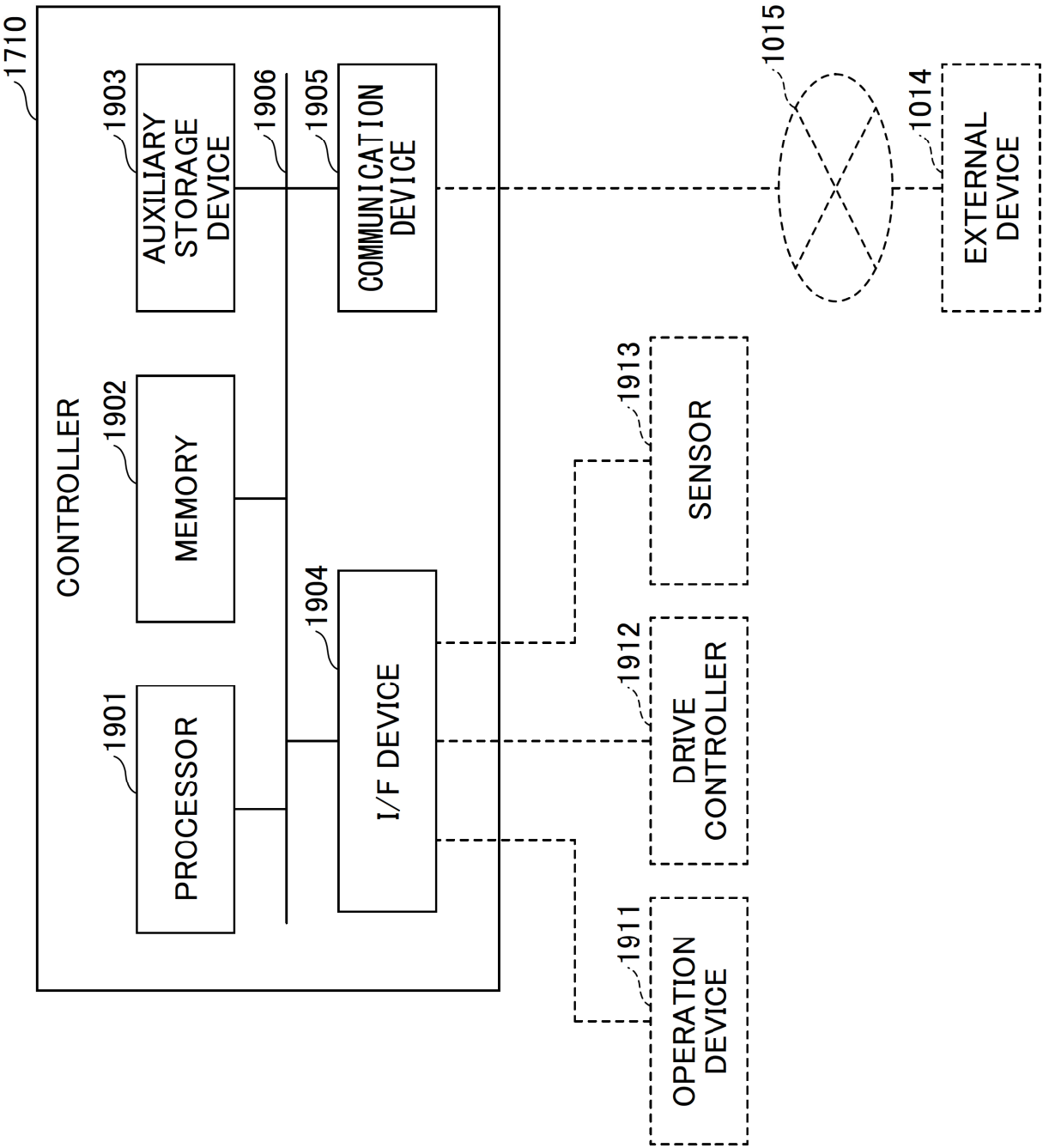


FIG.19

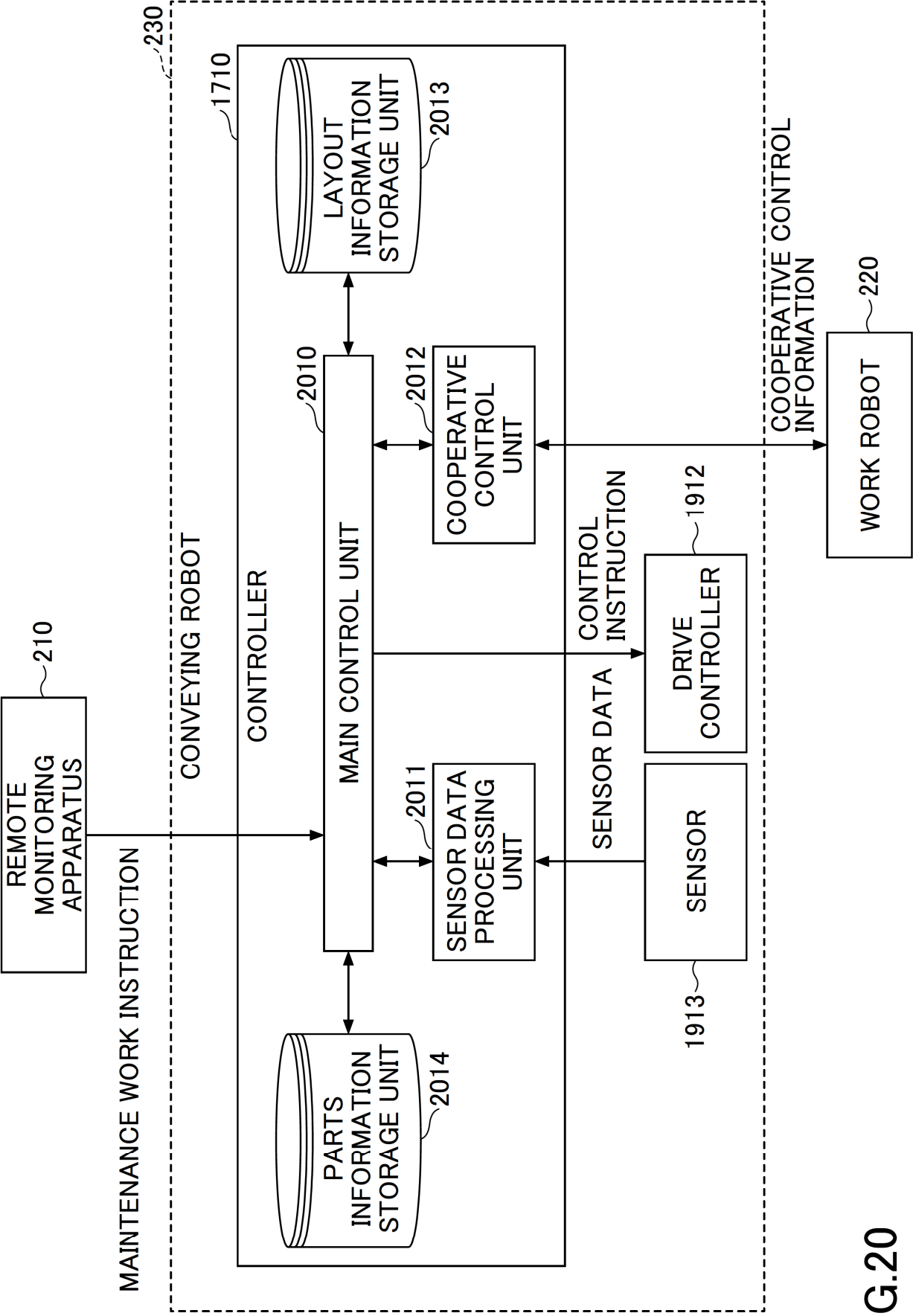


FIG.20

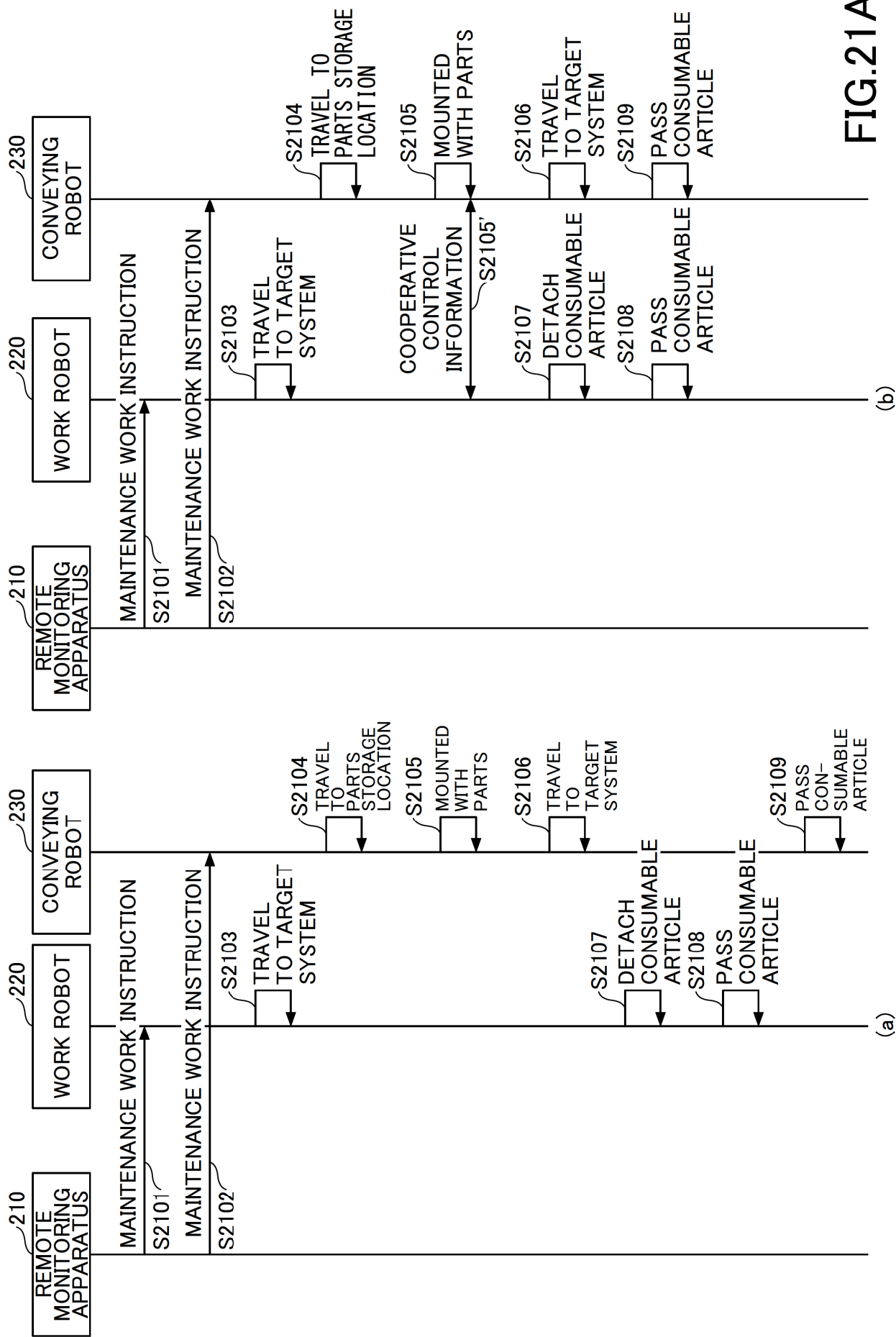


FIG.21A

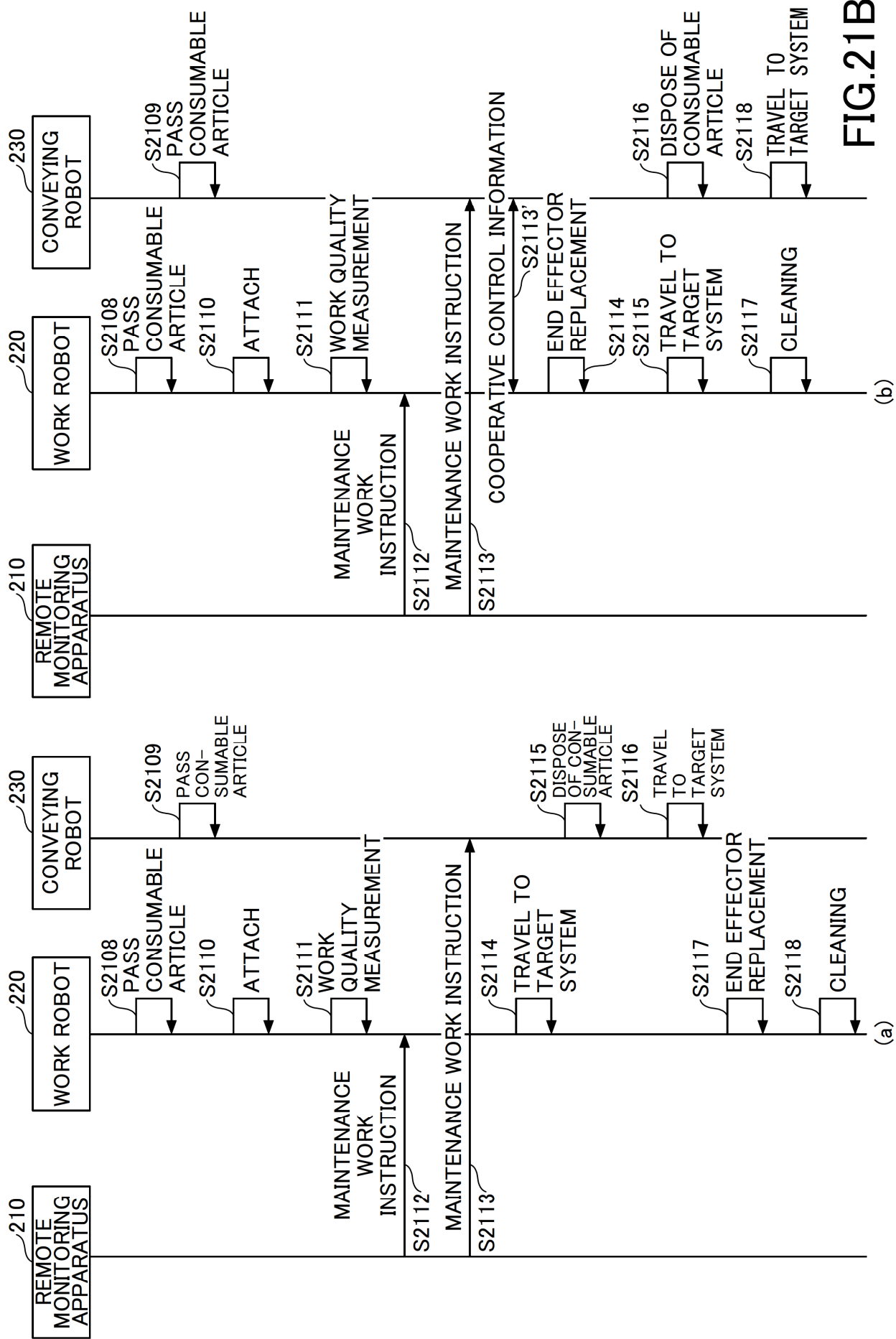


FIG.21B

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FIG.22

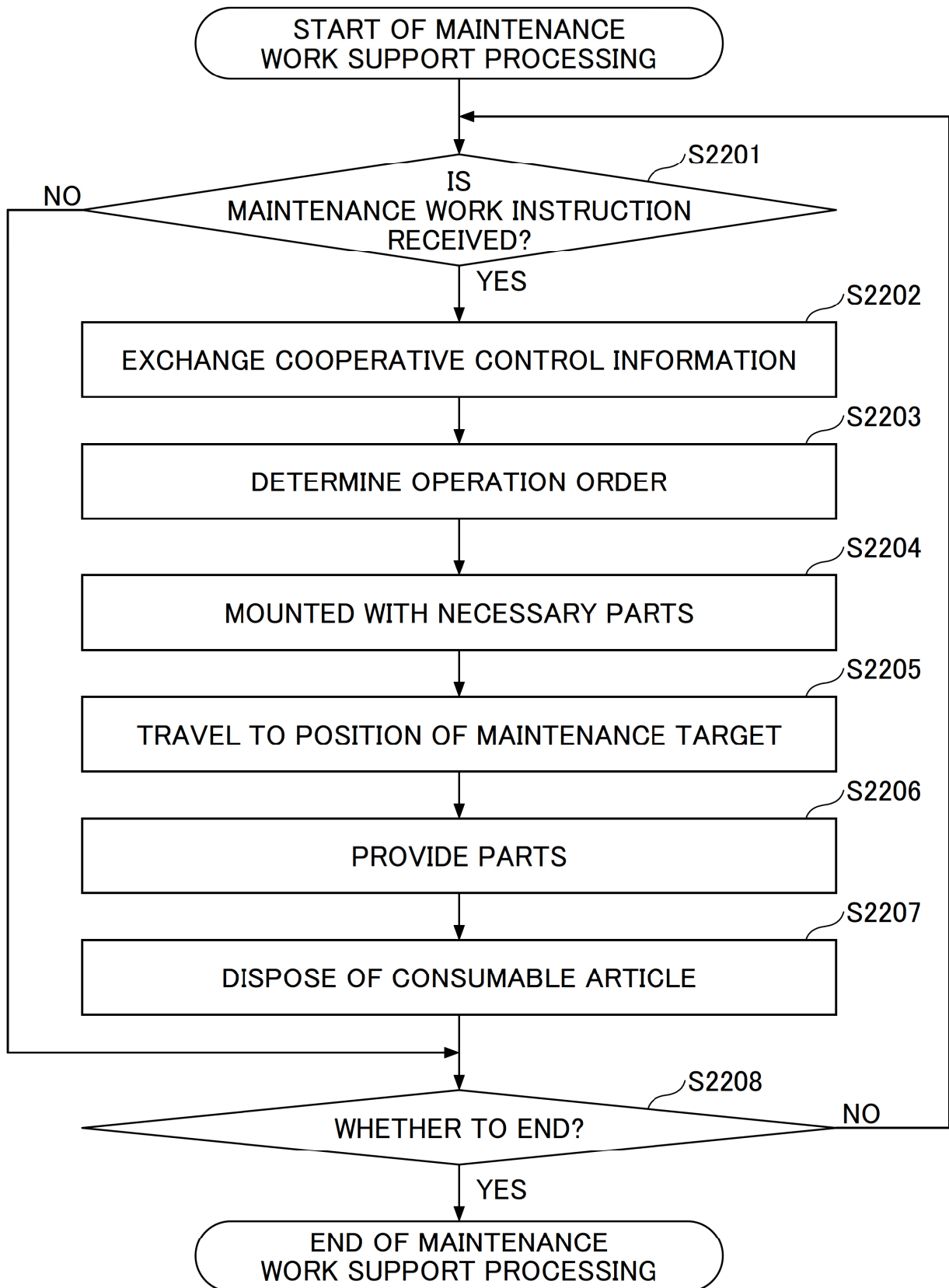
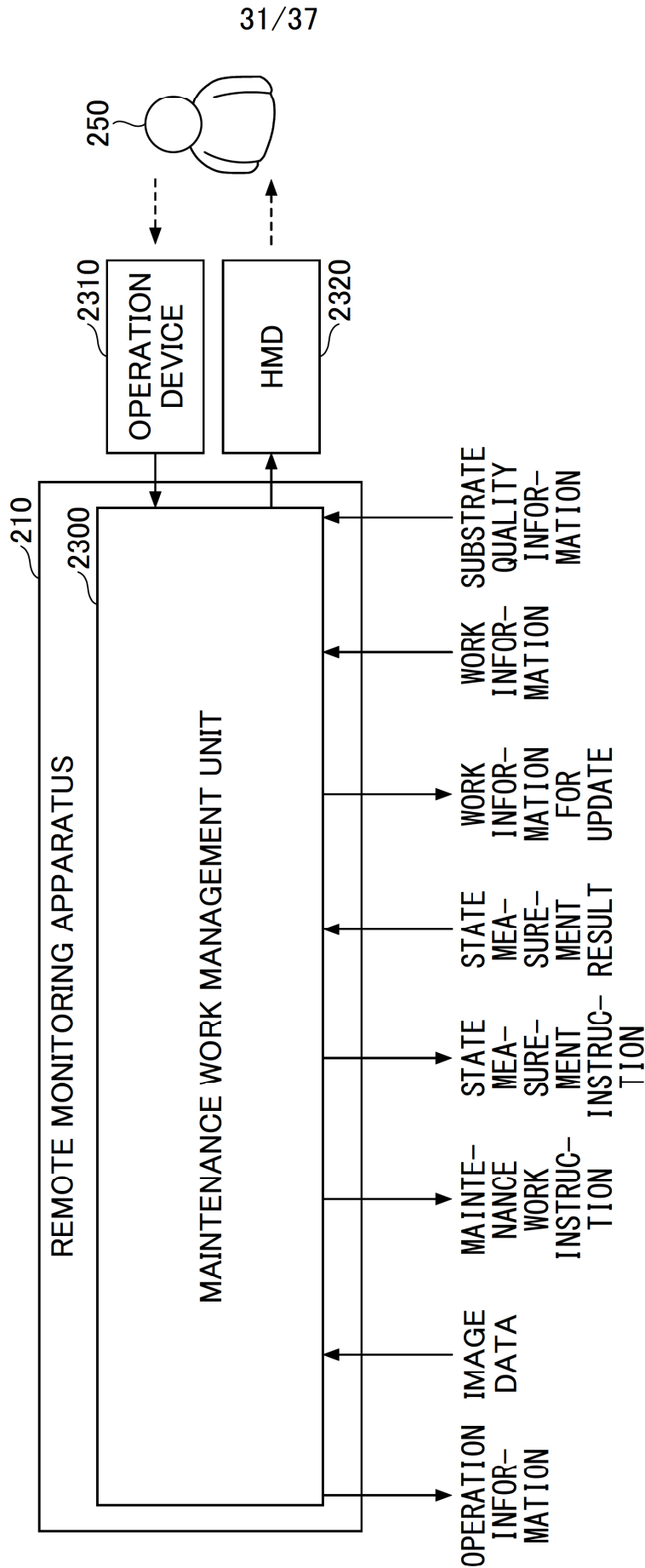


FIG.23



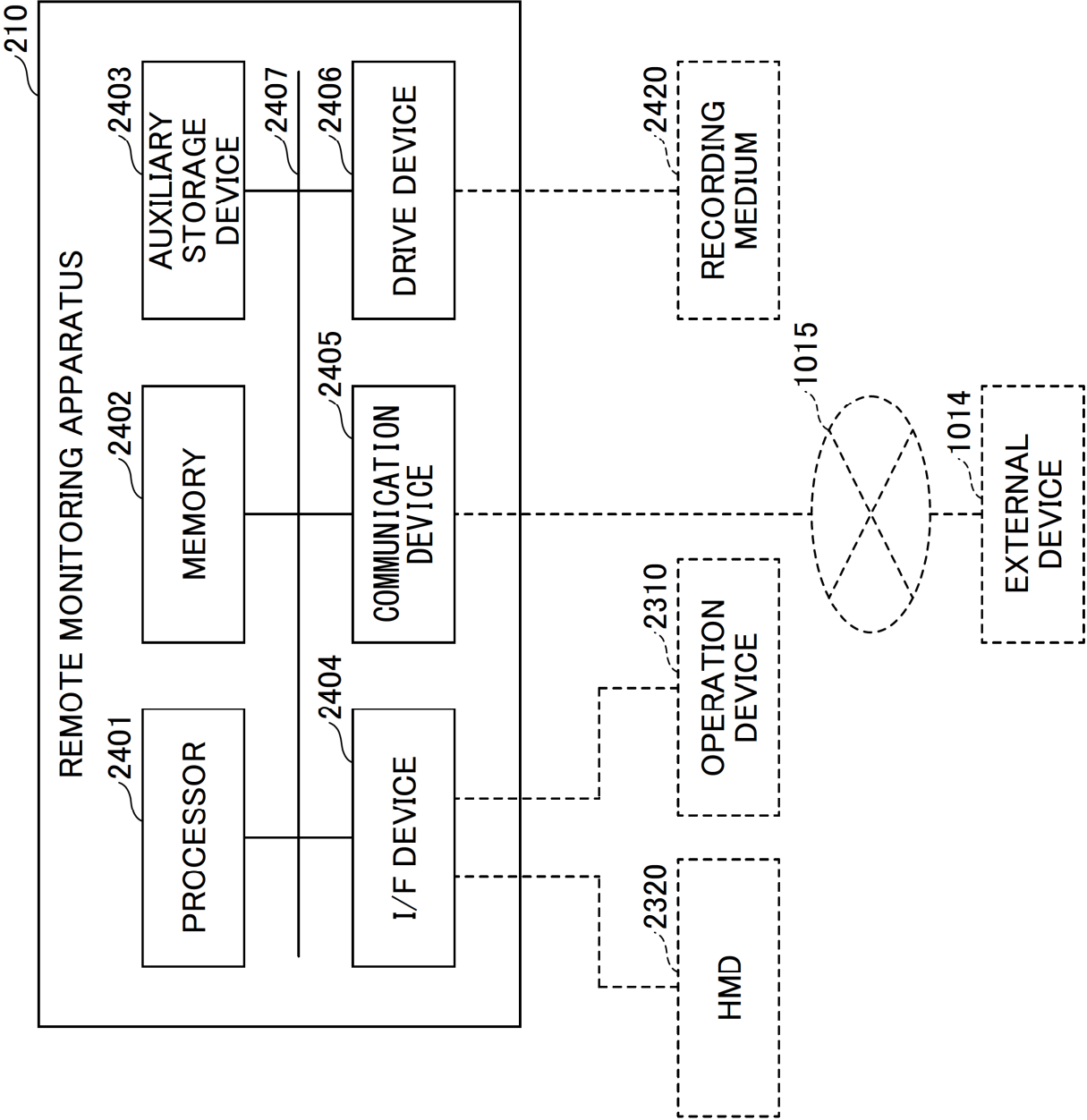
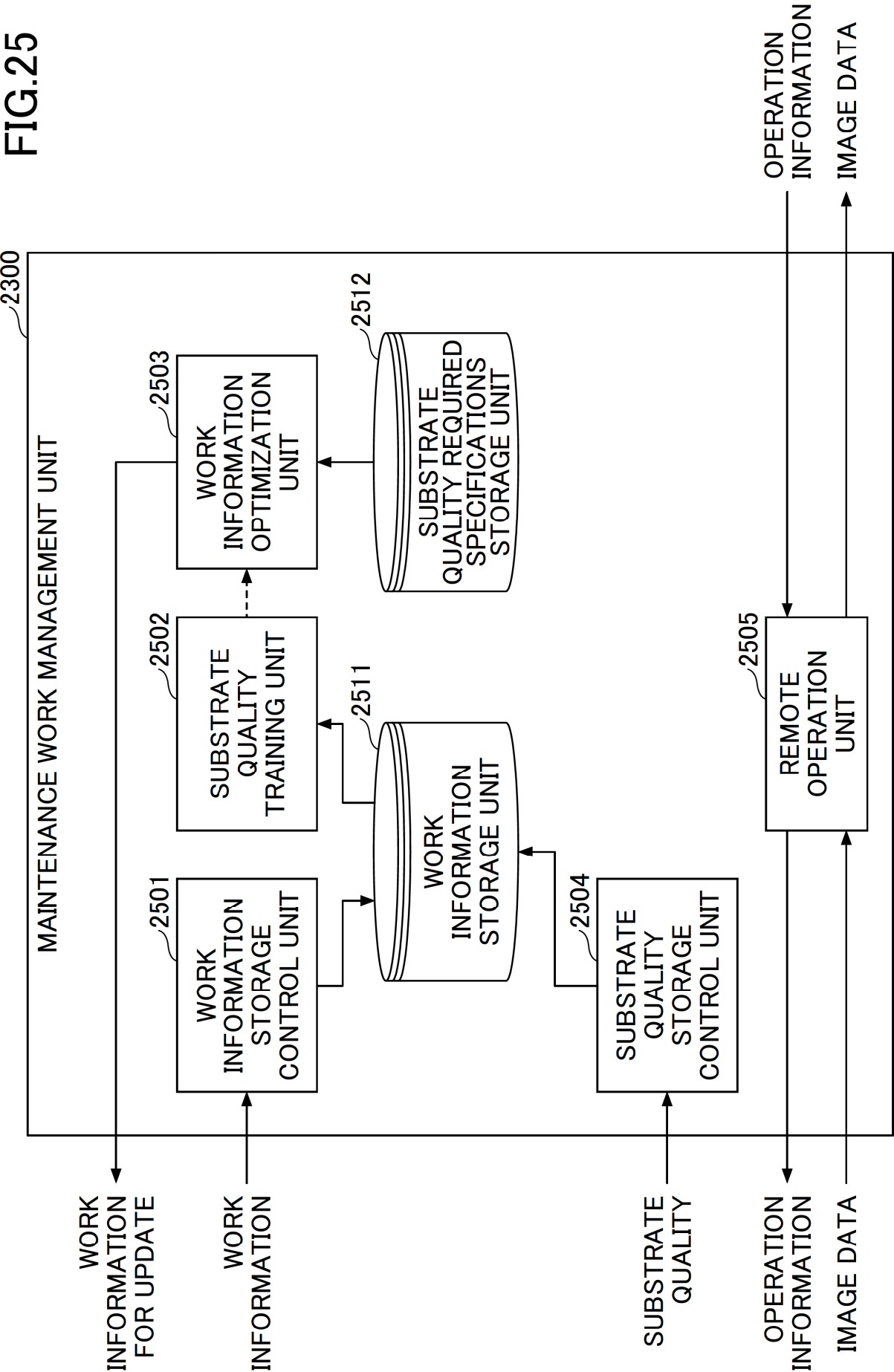


FIG.24

FIG.25



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FIG.26

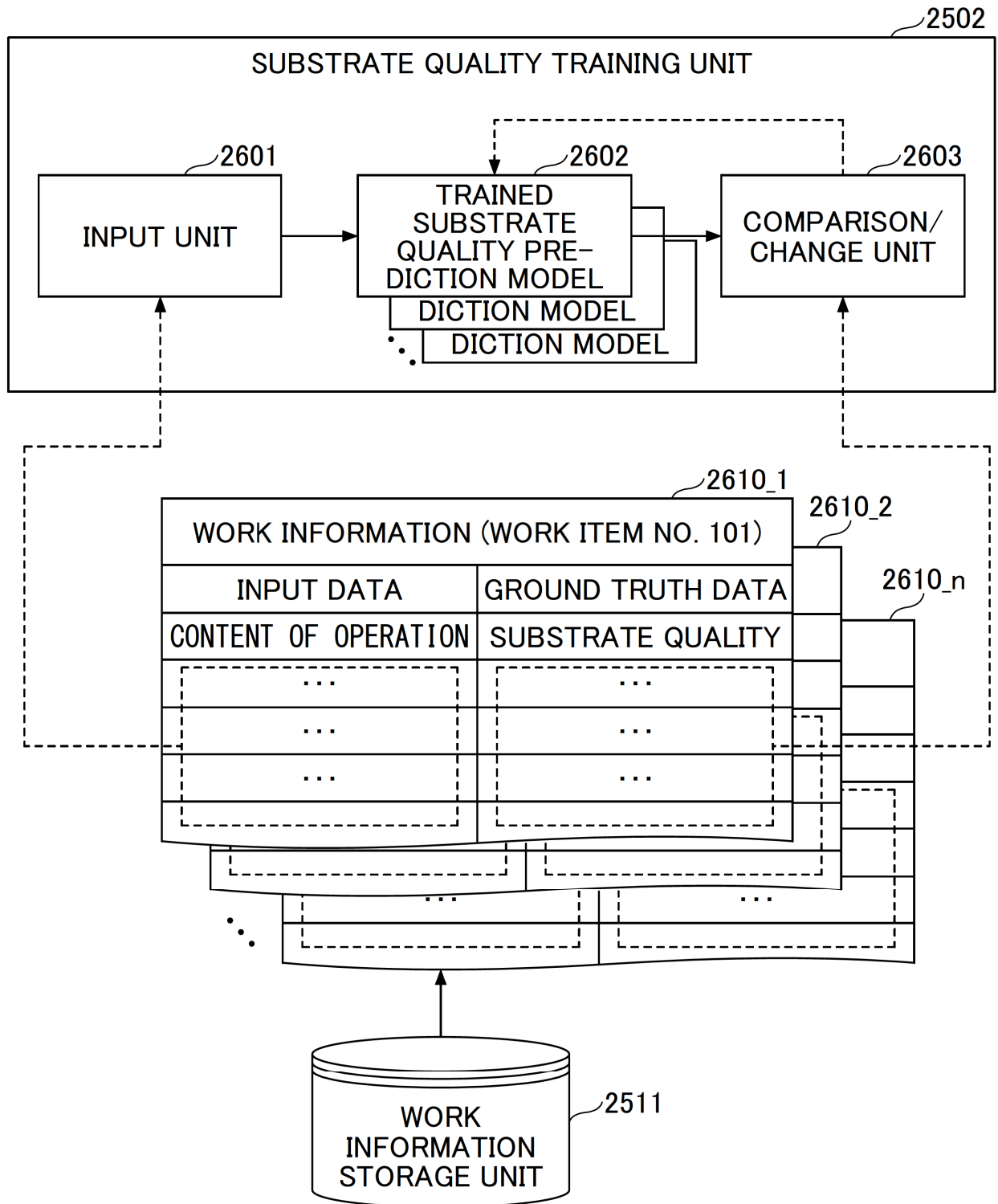
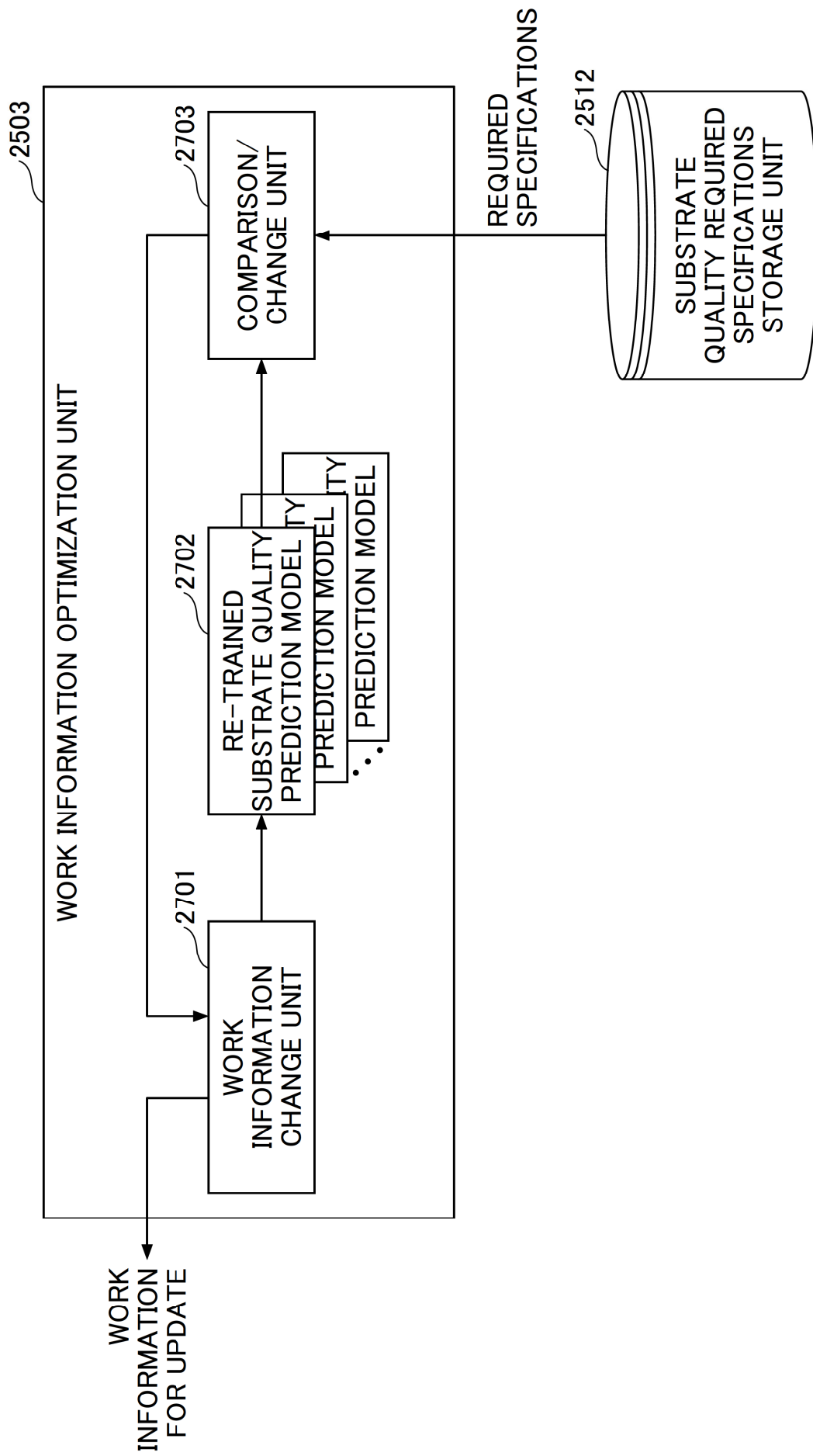
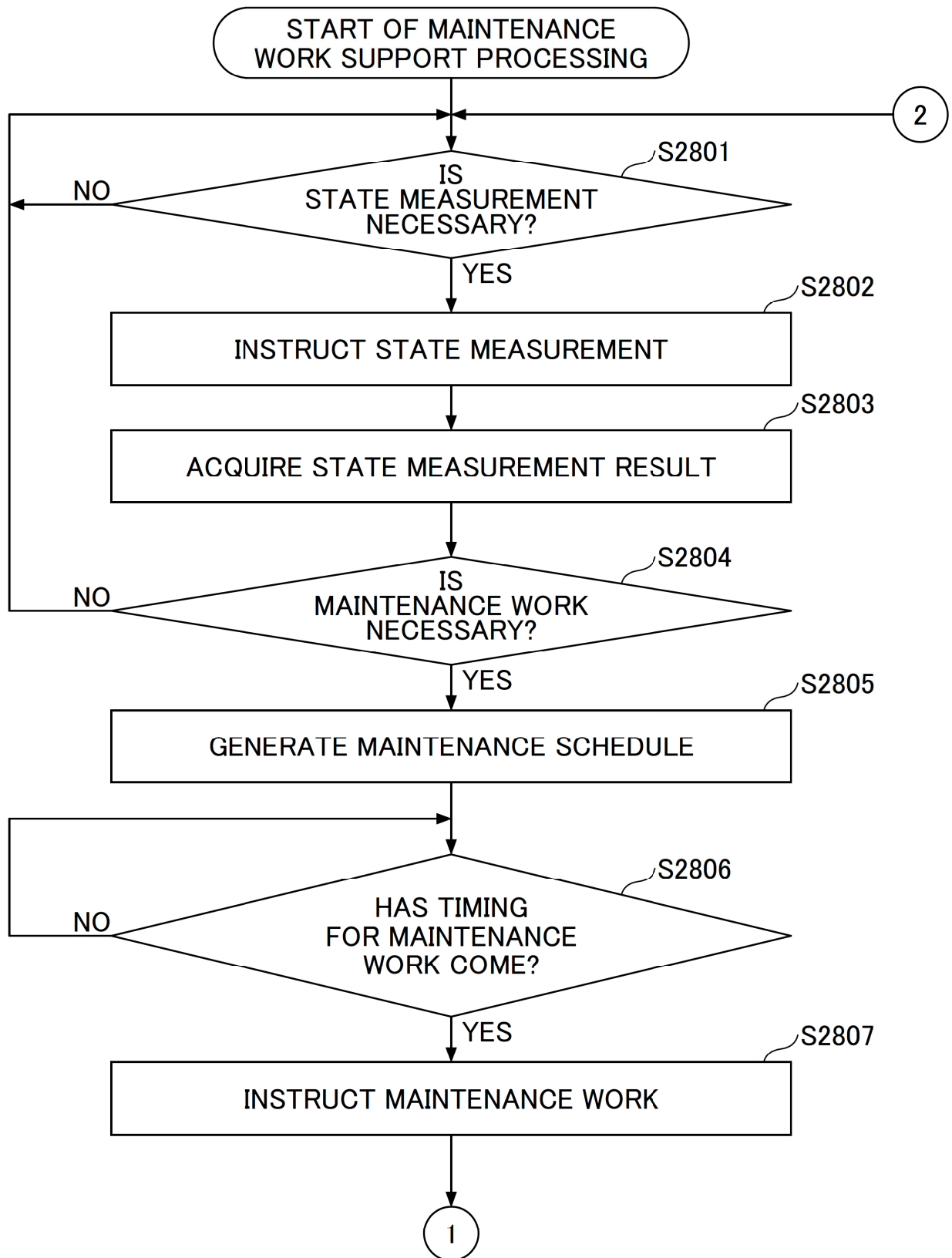


FIG. 27



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FIG.28A



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FIG.28B

