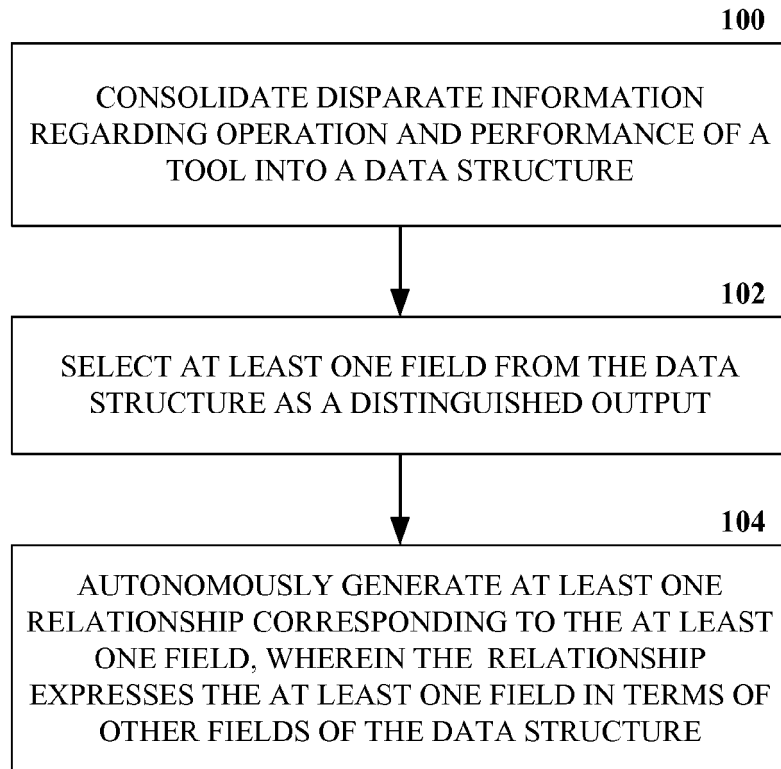


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**FIG. 1**

↖ 210

↖ 220

↖ 230

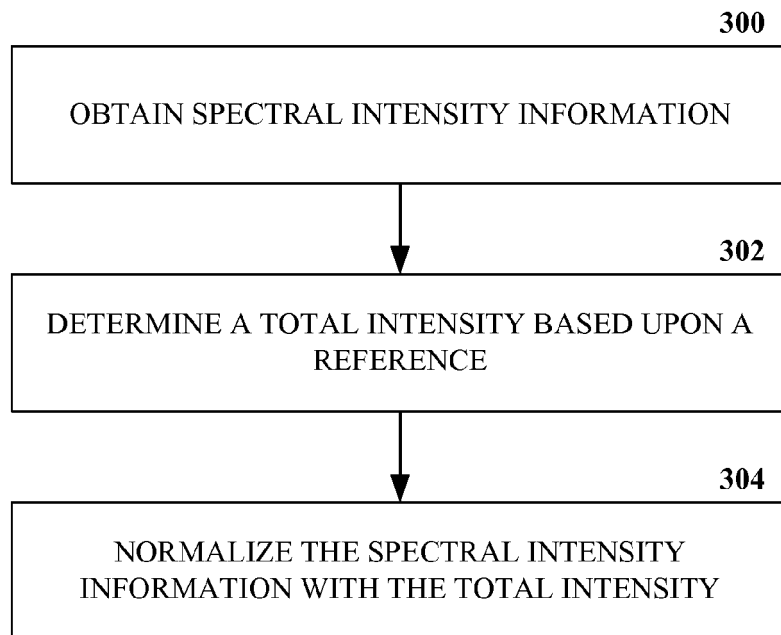
↖ 240

↖ 200

ID Tag(s)	Tool Operation Information			Spectral Intensity Information			Wafer Measurement Information			
	TIME	PRESSURE	...	I(1 ₁)	I(1 ₂)	I(1 _N)	FI-CD (1)	FI-CD (2)	...	FI-CD (M)
ID 1	t ₁	P ₁	...	I ₁₁	I ₁₂	I _{1N}	f ₁₁	f ₂₁	...	f _{M1}
ID 1	t ₂	P ₂	...	I ₂₁	I ₂₂	I _{2N}	f ₁₁	f ₂₁	...	f _{M1}
ID 1	t ₃	P ₃	...	I ₃₁	I ₃₂	I _{3N}	f ₁₁	f ₂₁	...	f _{M1}
...	...	...	...	...	...	...	...	...	...	...
ID K	t ₁	P ₁	...	I ₁₁	I ₁₂	I _{1N}	f ₁₂	f ₂₂	...	f _{M2}
ID K	t ₂	P ₂	...	I ₂₁	I ₂₂	I _{2N}	f ₁₂	f ₂₂	...	f _{M2}
ID K	t ₃	P ₃	...	I ₃₁	I ₃₂	I _{3N}	f ₁₂	f ₂₂	...	f _{M2}
...	...	...	...	...	...	...	...	...	...	...

FIG. 2

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**FIG. 3**

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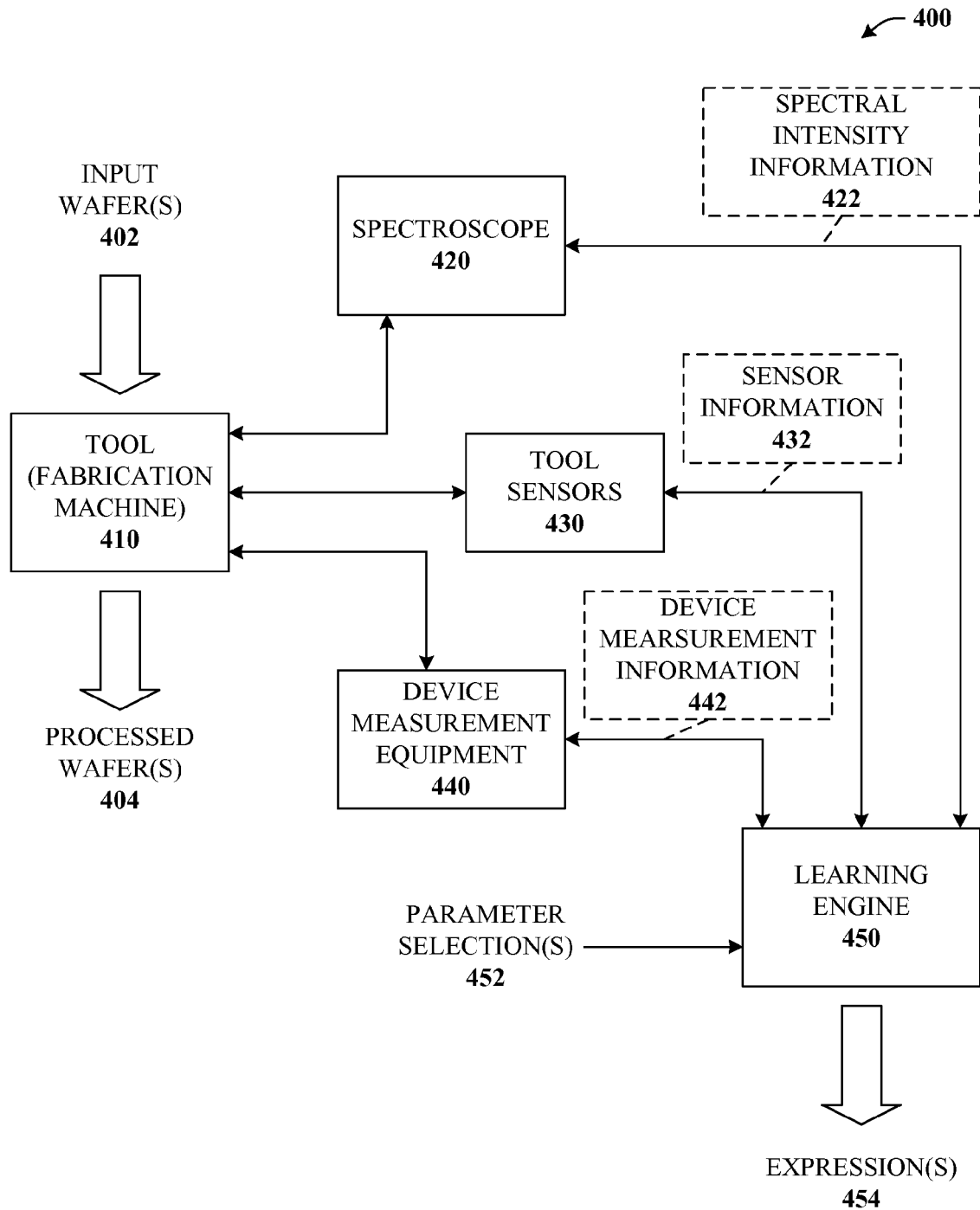
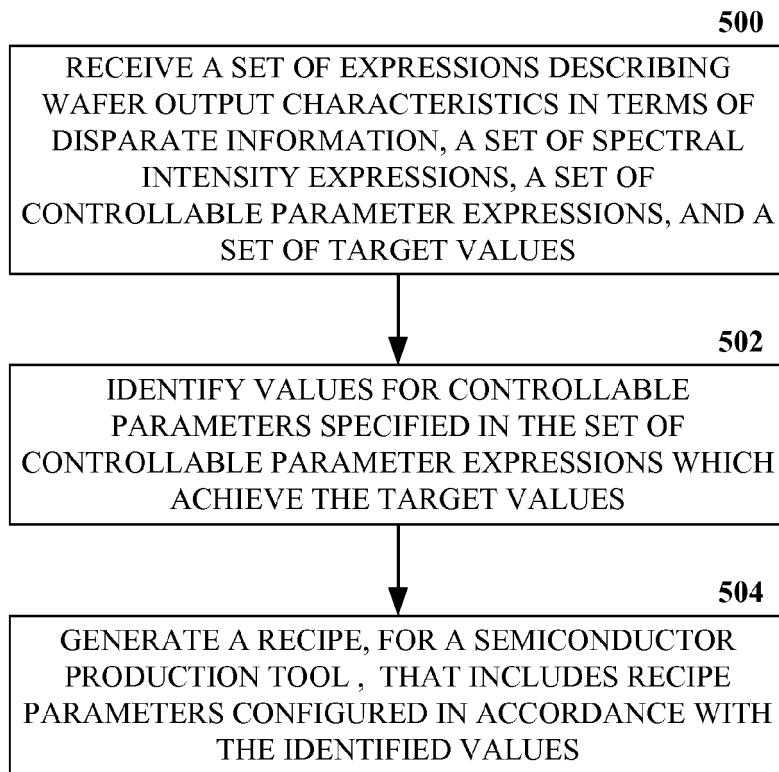


FIG. 4

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**FIG. 5**

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600

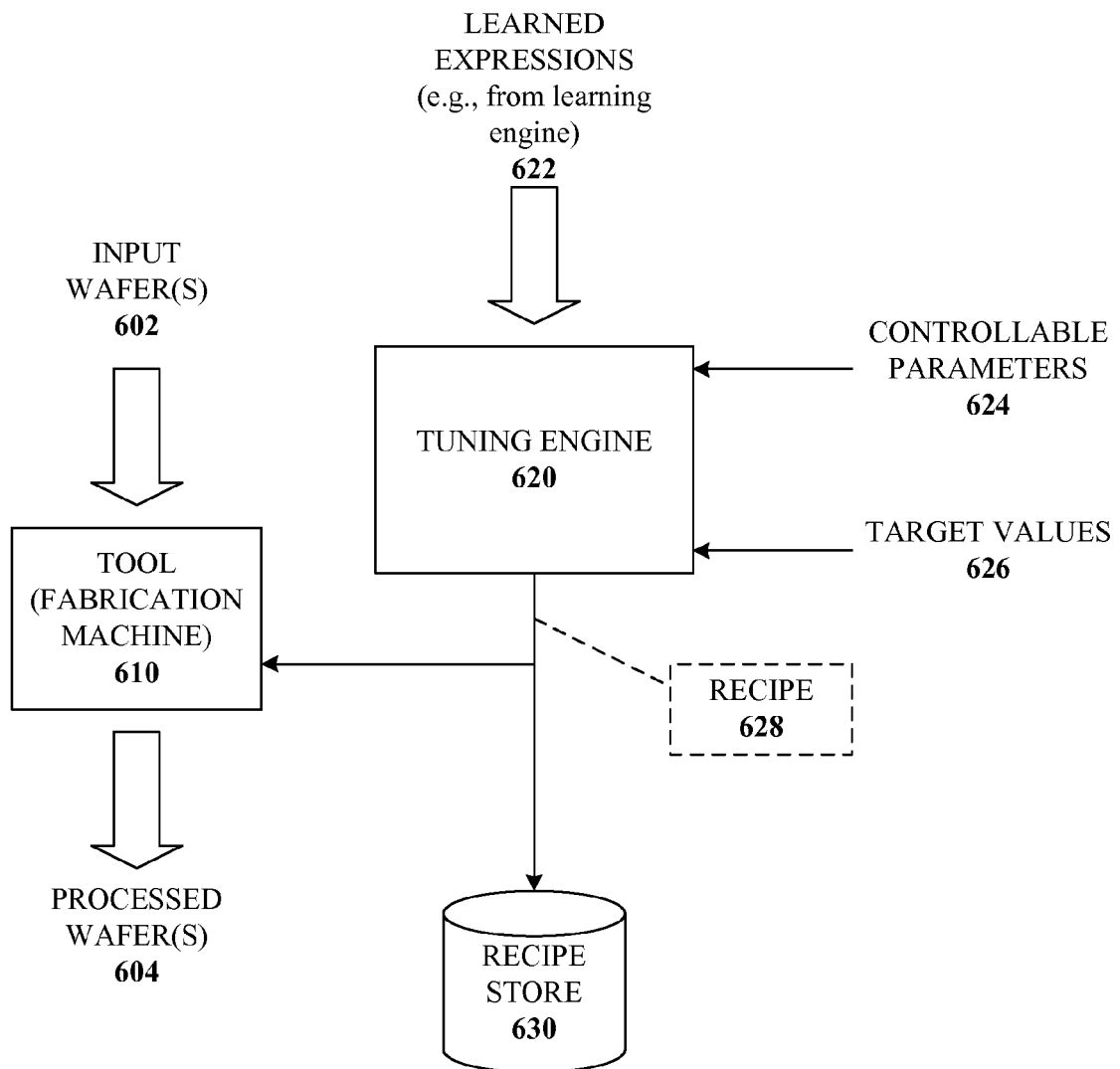
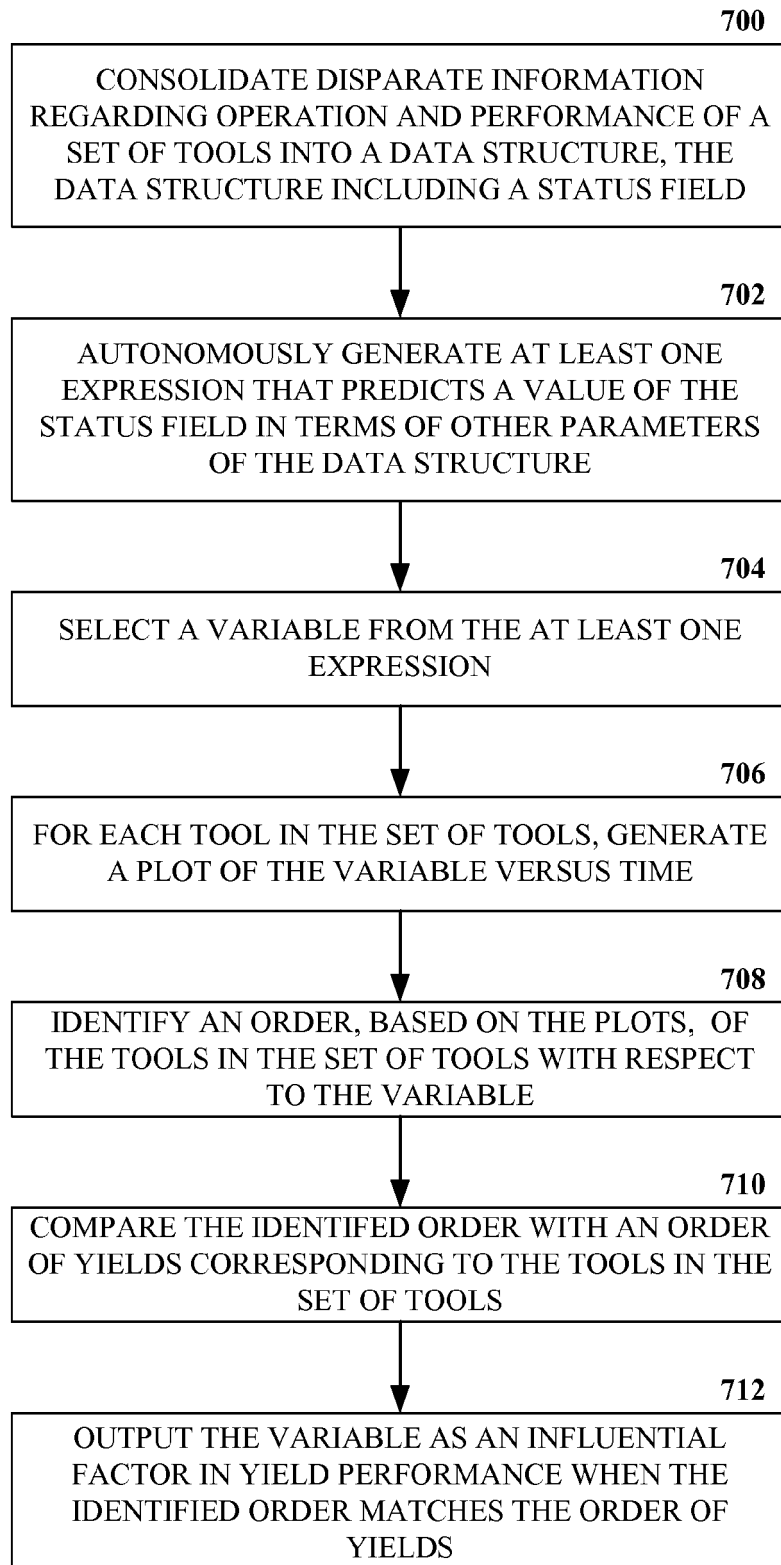


FIG. 6

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**FIG. 7**

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800

ID Tags			Spectroscopic Data				STATUS
WAFER ID	EQUIP. ID	TIME	I(l ₁)	I(l ₂)	...	I(l _N)	
ID 1	CH4	t ₁	I ₁₁	I ₁₂	.	I _{1N}	1
ID 1	CH4	t ₂	I ₂₁	I ₂₂	.	I _{2N}	1
ID 1	CH4	t ₃	I ₃₁	I ₃₂	.	I _{3N}	1
.	.	.	.	.	.	.	.
ID K	CH1	t ₁	I ₁₁	I ₁₂	.	I _{1N}	0
ID K	CH1	t ₂	I ₂₁	I ₂₂	.	I _{2N}	0
ID K	CH1	t ₃	I ₃₁	I ₃₂	.	I _{3N}	0
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.

850

ID Tags			Sensor Data	Spectroscopic Data				STATUS
WAFER ID	EQUIP. ID	TIME	PRESSURE	I(l ₁)	I(l ₂)	...	I(l _N)	
ID 1	CH4	t ₁	P ₁	I ₁₁	I ₁₂	.	I _{1N}	1
ID 1	CH4	t ₂	P ₂	I ₂₁	I ₂₂	.	I _{2N}	1
ID 1	CH4	t ₃	P ₃	I ₃₁	I ₃₂	.	I _{3N}	1
.	.	.	.	.	.	.	.	.
ID K	CH1	t ₁	P ₁	I ₁₁	I ₁₂	.	I _{1N}	0
ID K	CH1	t ₂	P ₂	I ₂₁	I ₂₂	.	I _{2N}	0
ID K	CH1	t ₃	P ₃	I ₃₁	I ₃₂	.	I _{3N}	0
.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.

FIG. 8

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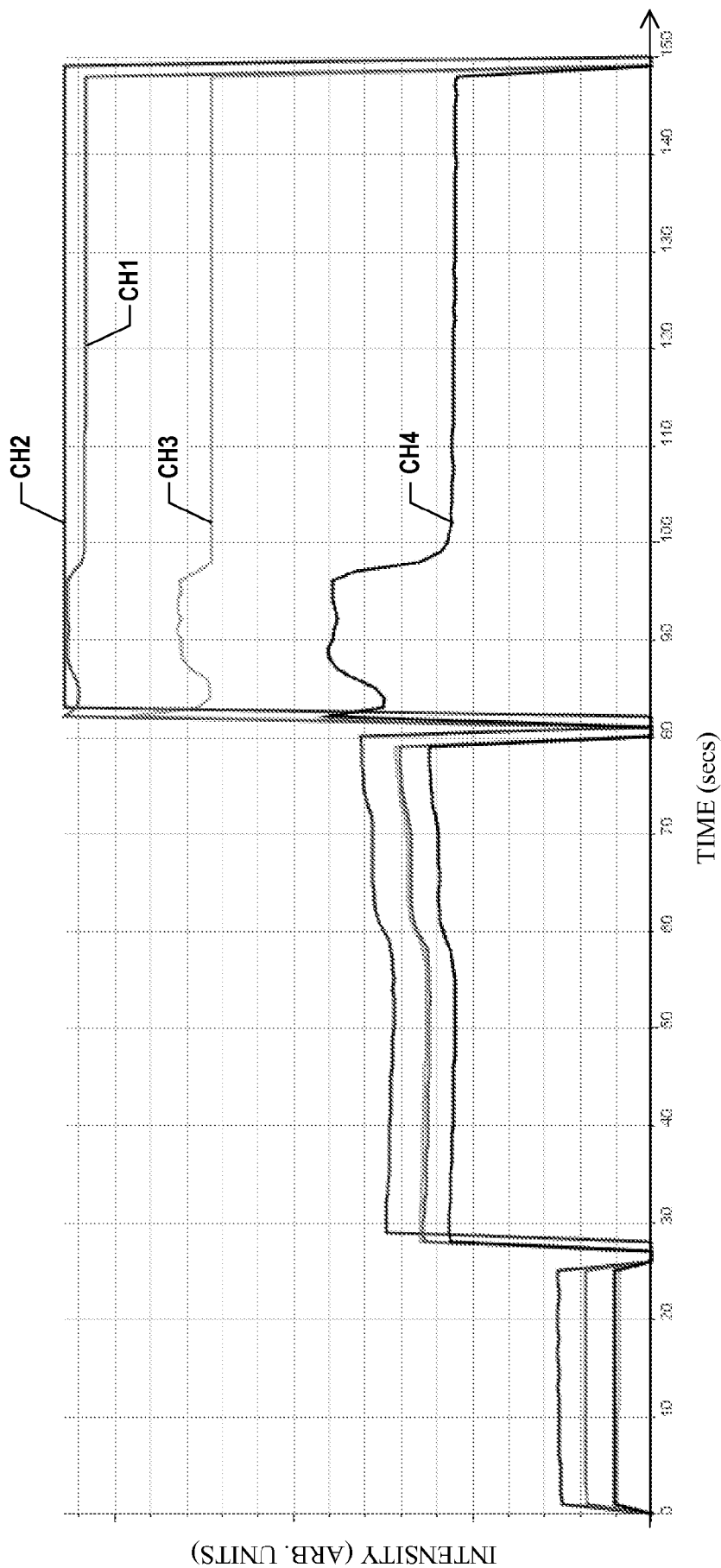
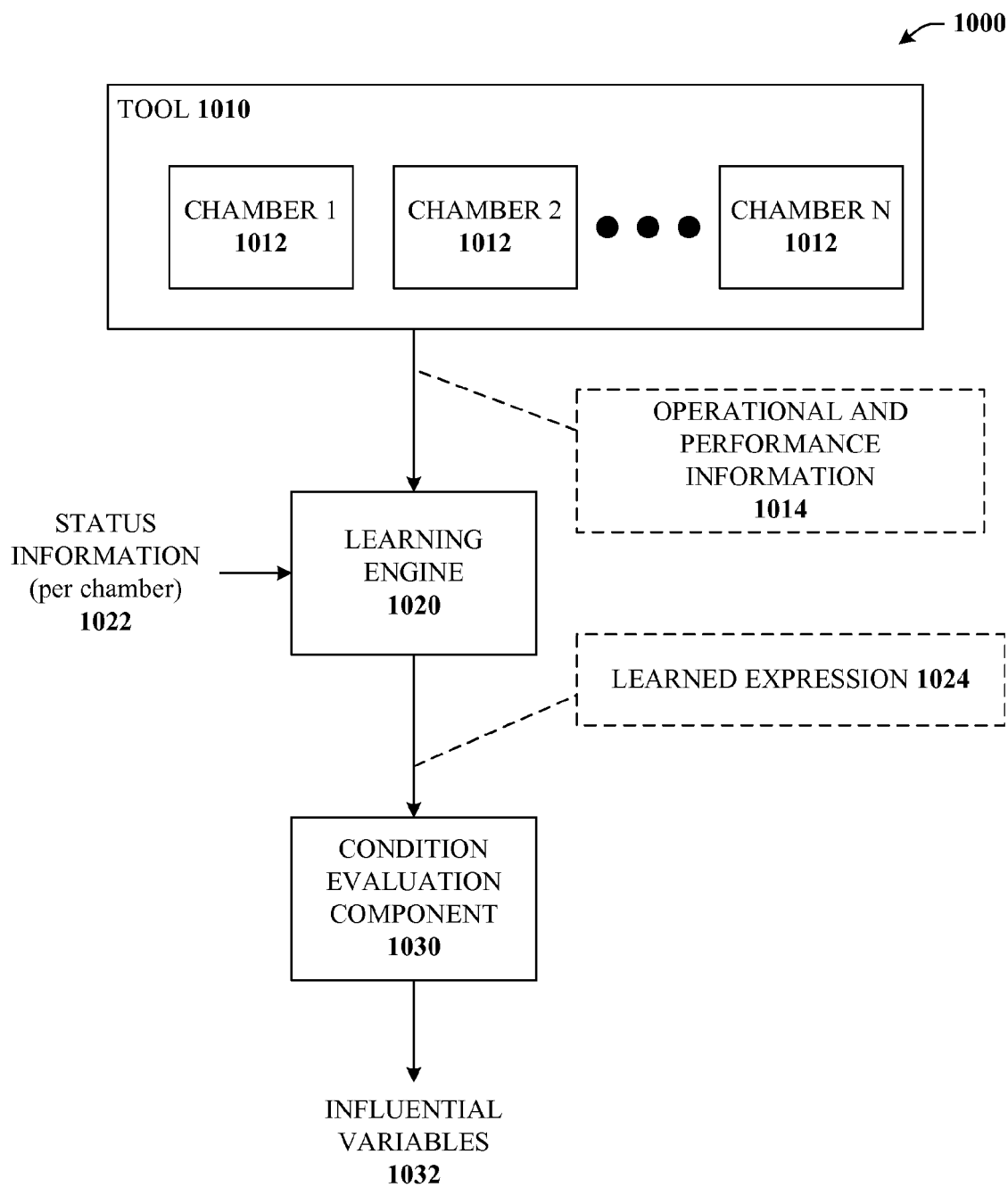
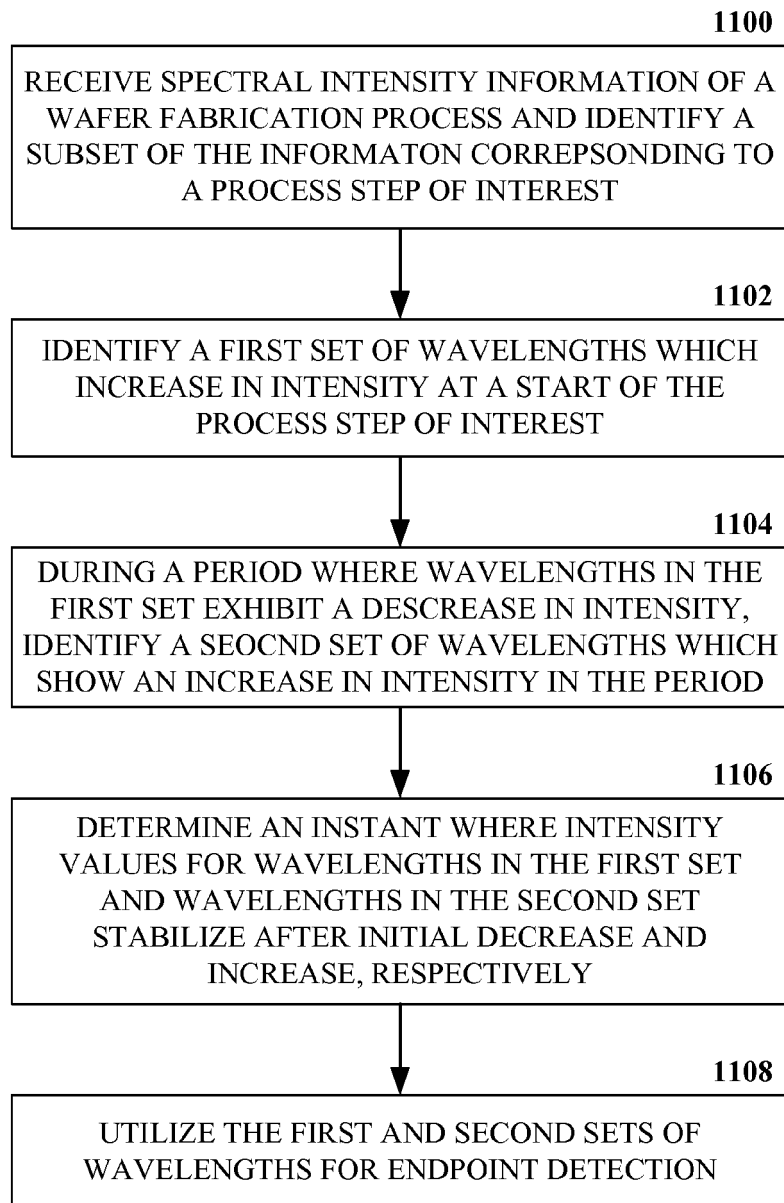


FIG. 9

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**FIG. 10**

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**FIG. 11**

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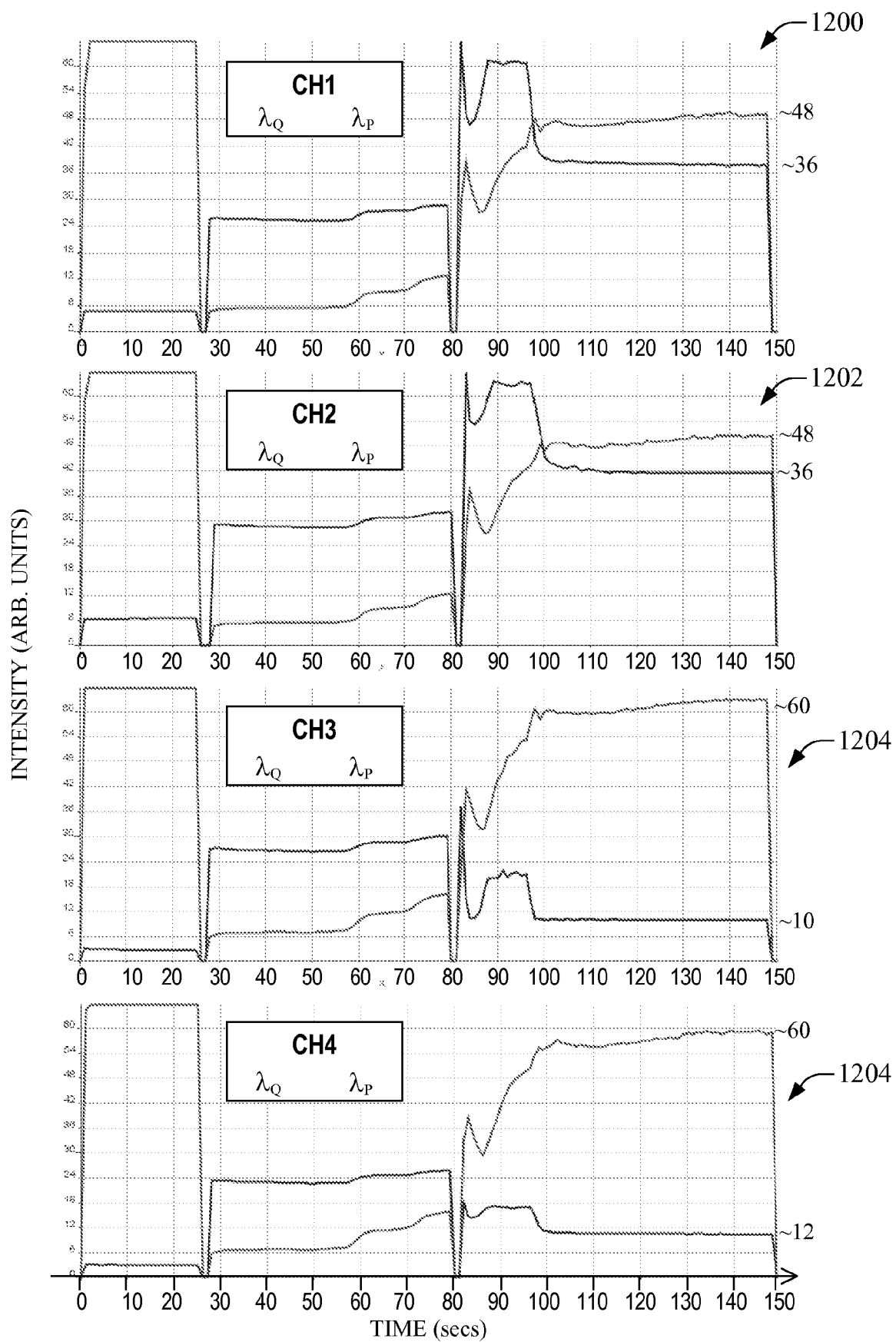


FIG. 12

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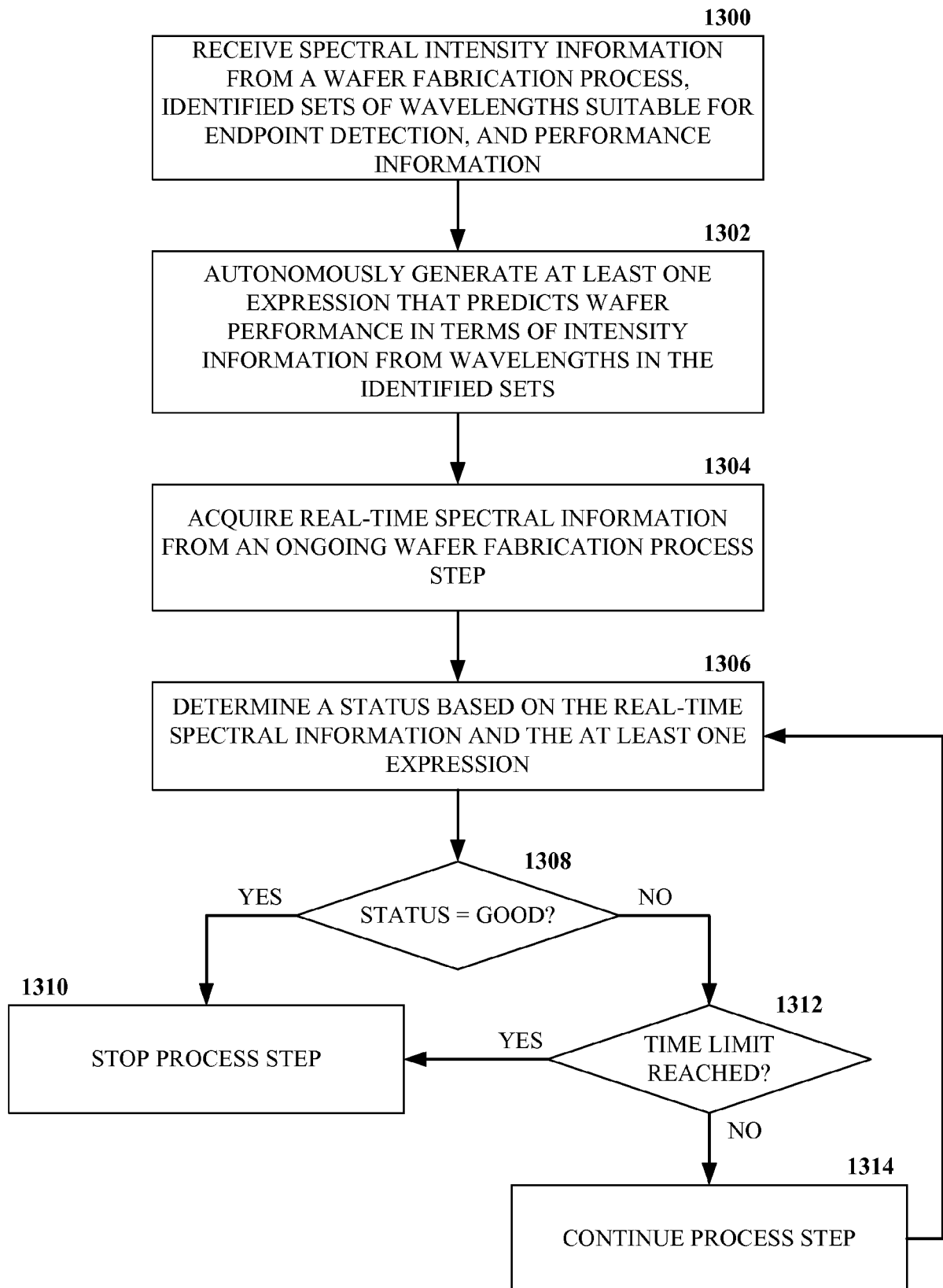


FIG. 13

↖ 1400

Spectral Intensity
Informatoin

⏟

WAFER ID	TIME	I(l _P)	I(l _Q)	...	STATUS
ID 1	t ₁	I _{1P}	I _{1Q}	...	0
ID 1	t ₂	I _{2P}	I _{2Q}	...	0
ID 1	t ₃	I _{3P}	I _{3Q}	...	0
⋮	⋮	⋮	⋮	⋮	⋮
ID 1	t _R	I _{RP}	I _{1Q}	...	1
ID 1	t _{R+1}	I _{(R+1)P}	I _{2Q}	...	1
ID 1	t _{R+2}	I _{(R+2)P}	I _{3Q}	...	1
⋮	⋮	⋮	⋮	⋮	⋮
ID K	t ₁	I _{1P}	I _{1Q}	...	0
ID K	t ₂	I _{2P}	I _{2Q}	...	0
ID K	t ₃	I _{3P}	I _{3Q}	...	0
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 14

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1500

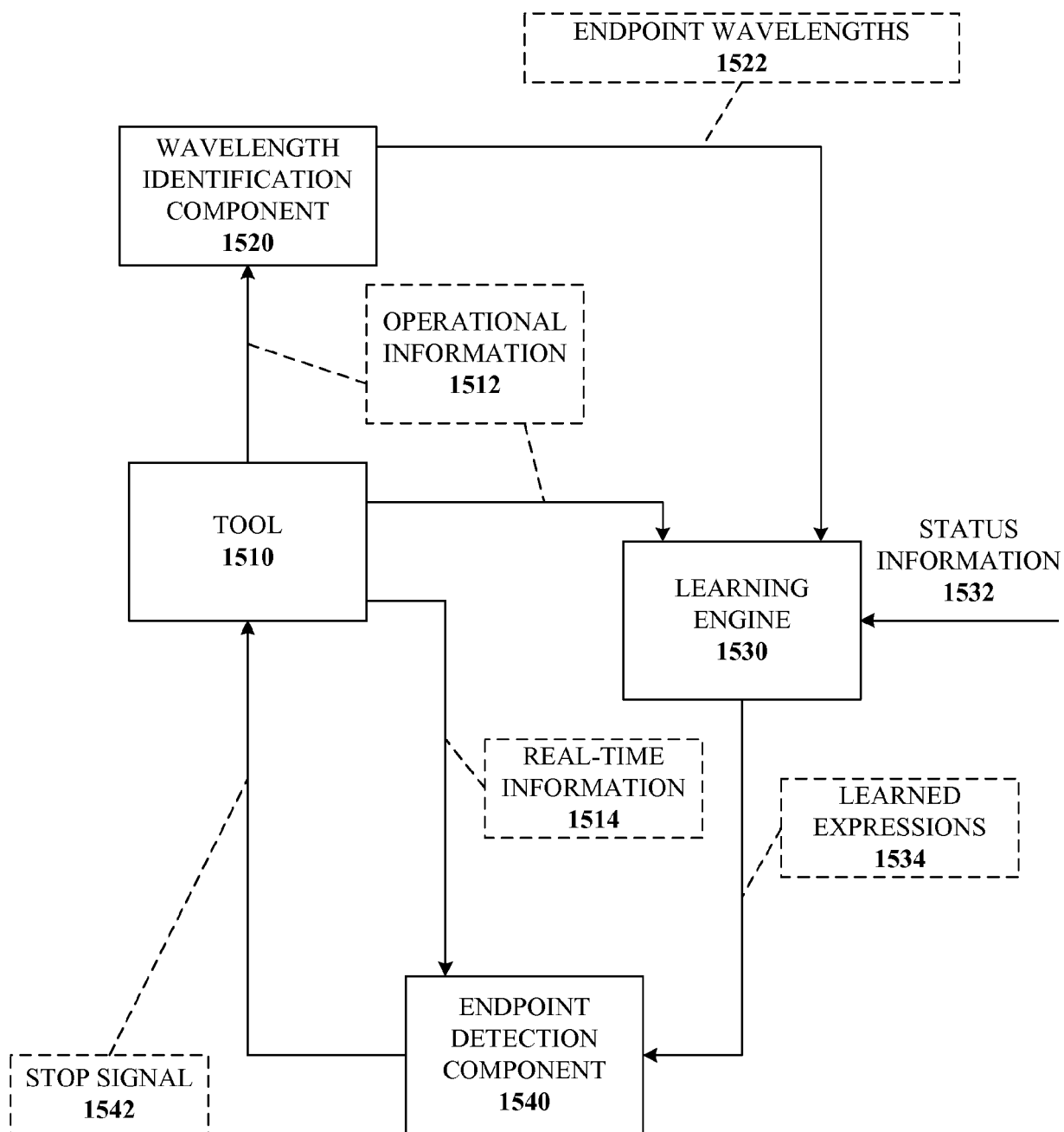


FIG. 15