

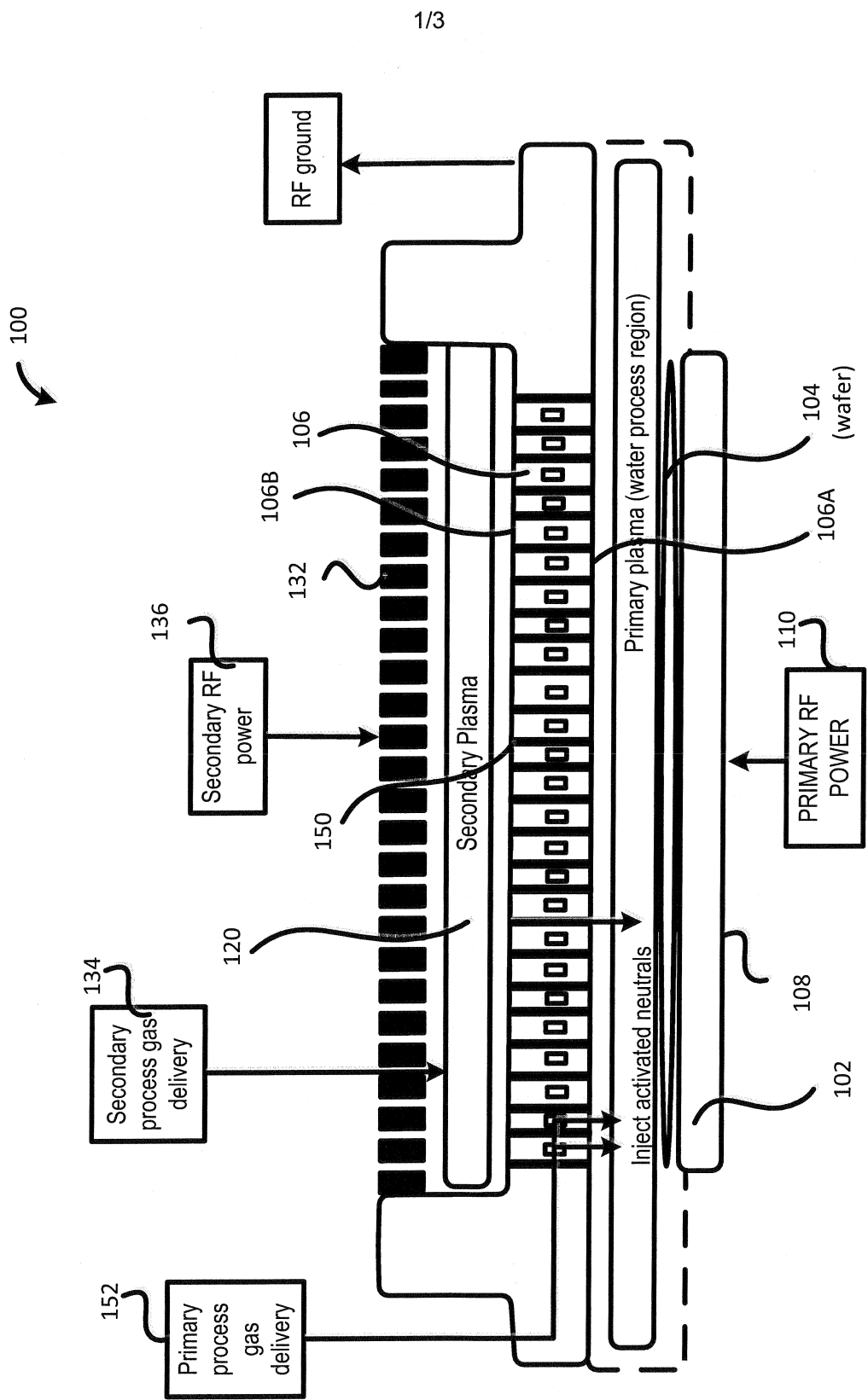


FIG. 1

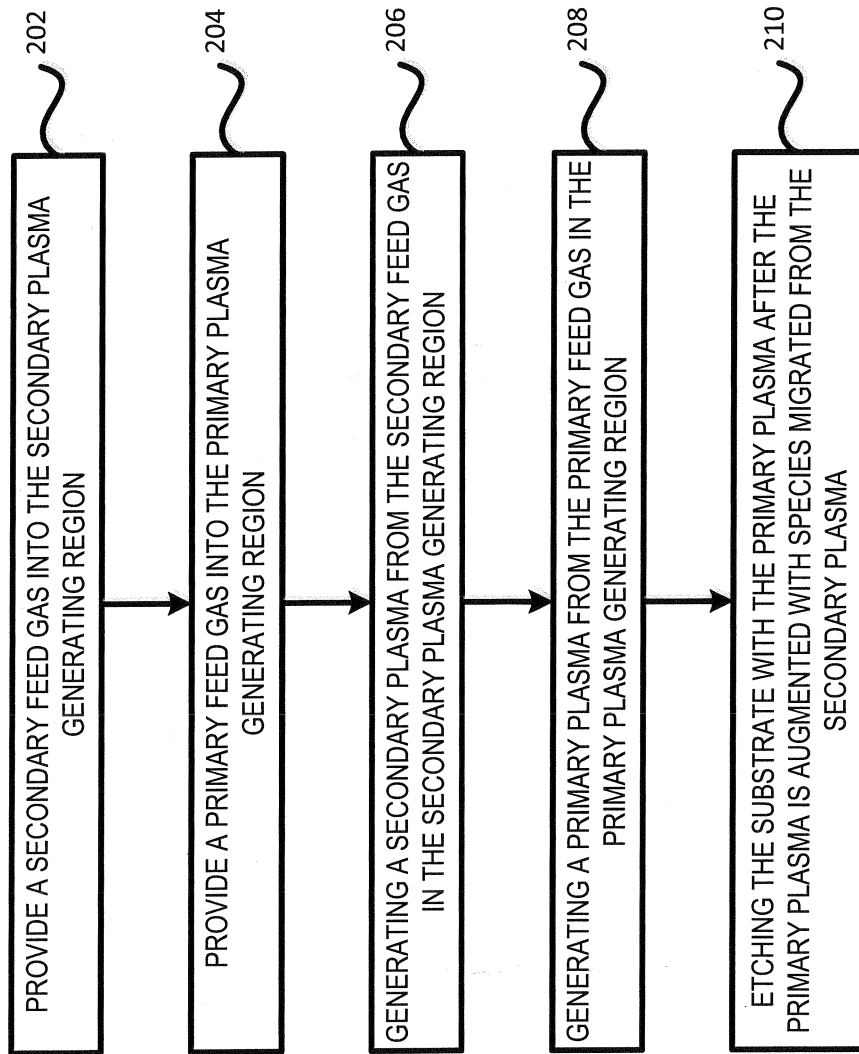


FIG. 2

ROW NUMBER	ETCH APPLICATION	SECONDARY GAS	PRIMARY GAS	POWER REGIME	BENEFIT
1	CD shrink (BARC, SiARC)	H2	CF4, CHxFy	Very low bias	Control polymer independent of ion flux/energy
2	Etching of Si-based materials	H2	CF4, CxFy, CHxFy	Any	Decoupled control of polymer
3	Trench etch, mask open, barrier open	O2, N2, NF3	Ar, FC	Low bias	Control etchant or oxidizer independent of ion flux/energy
4	Cell/HARC	Ar, N2	Ar, FC, O2	High Density & Bias	Inject metastables to lower Te -> less dissociation at same ion flux
5	Low-damage strip	N2	CO2	Low bias	Inject metastables to lower Te -> less dissociation at same ion flux
6	Low-damage strip	H2	N2	Low bias	Inject H radicals without damaging H2 VUV radiation
7	Deflourination	H2	none	No plasma at wafer	In-situ downstream

FIG. 3 – Table 1