

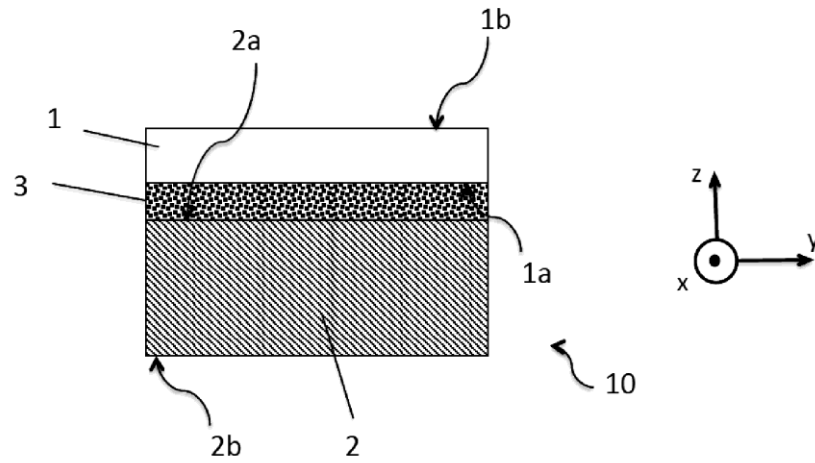


FIG.1

Material	Longitudinal wave acoustic velocity (VL) (m/s)	Density ρ (g/cm ³)	Acoustic impedance (x1E6) (kg/(m ² .s))	Resistivity (ohm.cm)	Permittivity
SiO ₂	6000	2.2	13.20	1.00E+17	3.9
Si	8430	2.34	19.70	250000	11.7
Ge	5410	5.47	29.60		
Si ₃ N ₄	9900	2.20	21.78	1e10 - 1e15	9.5-10.5
SiC	13000	13.80	91.80	1E2-1E6	
Al ₂ O ₃	10520	3.86	40.60	>1E14	9.8
Sapphire, aluminium oxide	11100	3.99	44.30		
Zirconium	4650	6.48	30.10		

TAB.1a

Material	Longitudinal wave acoustic velocity (VL) (m/s)	Density ρ (g/cm ³)	Acoustic impedance (x1E6) (kg/(m ² .s))
AlN	11000	3.27	36.00
LTO	6000	7.46	44.76
LNO	7000	4.64	32.48

TAB.1b

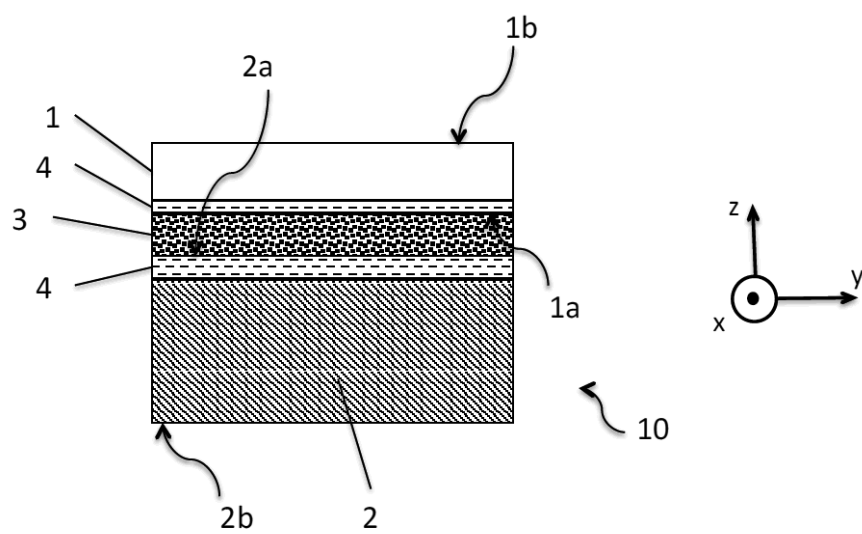


FIG.2a

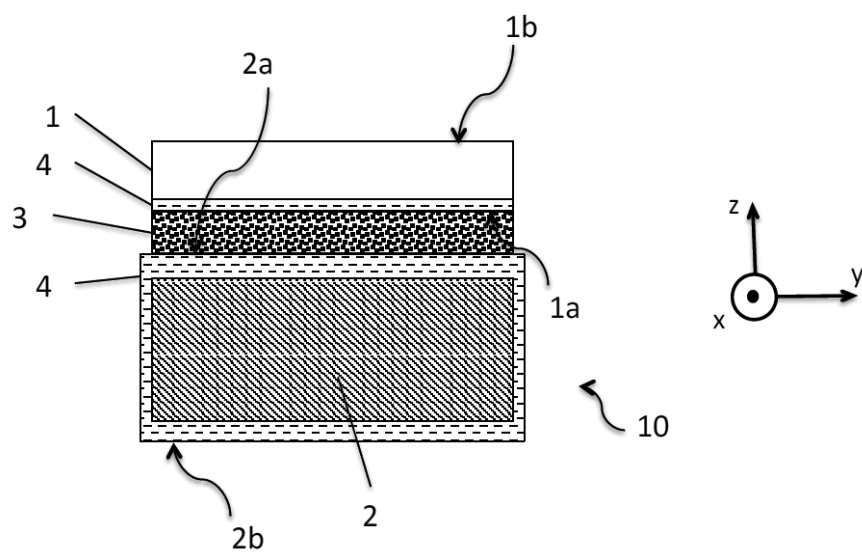


FIG.2b

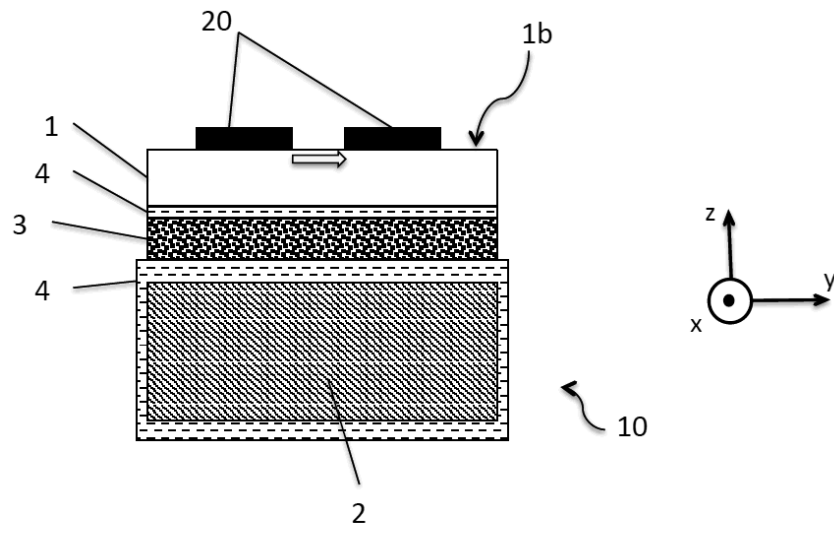


FIG.3

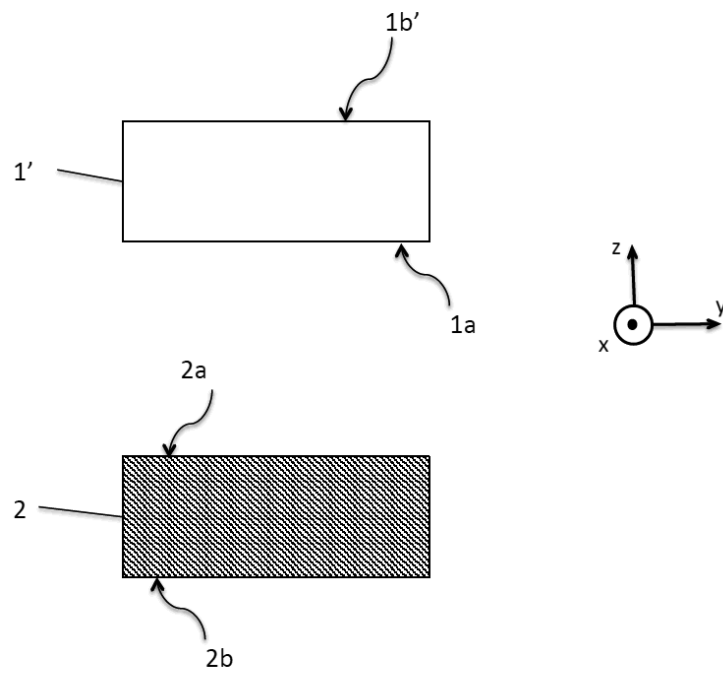


FIG.4a

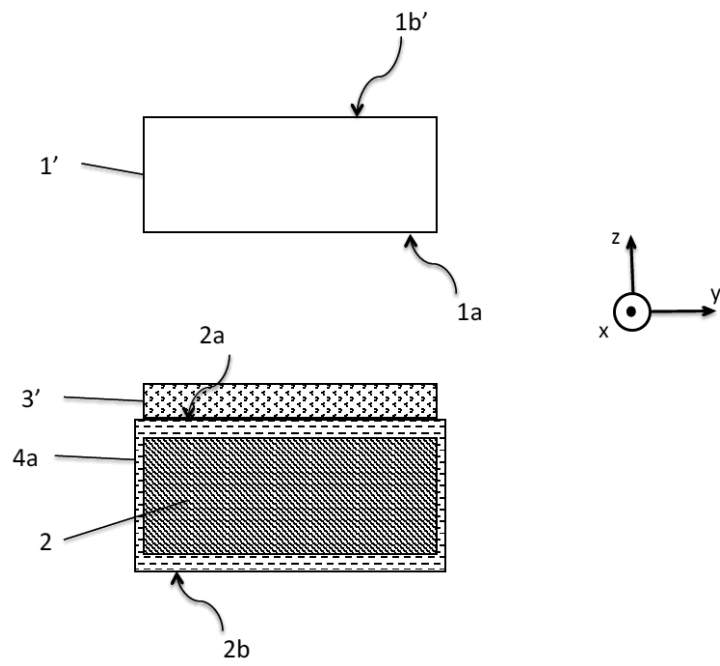


FIG. 4b

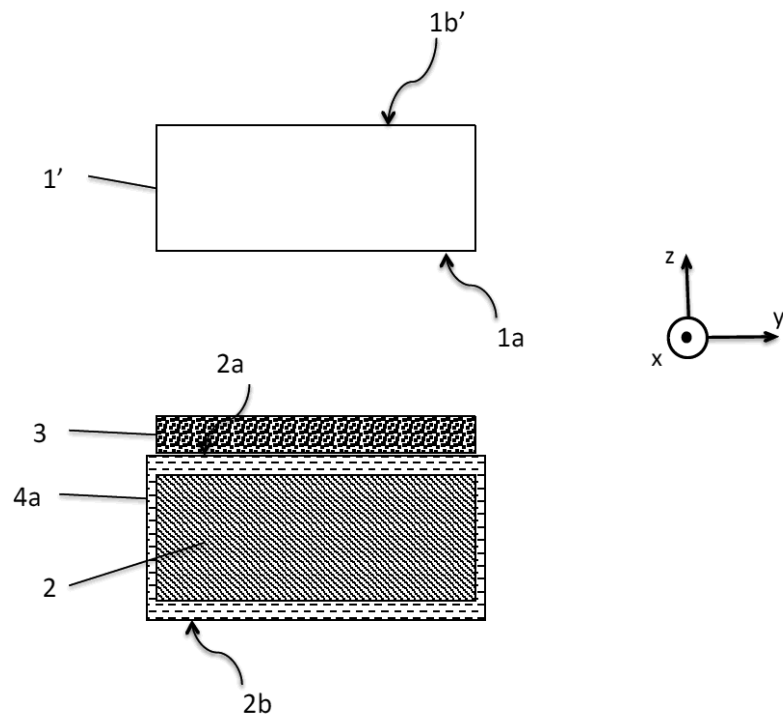


FIG. 4c

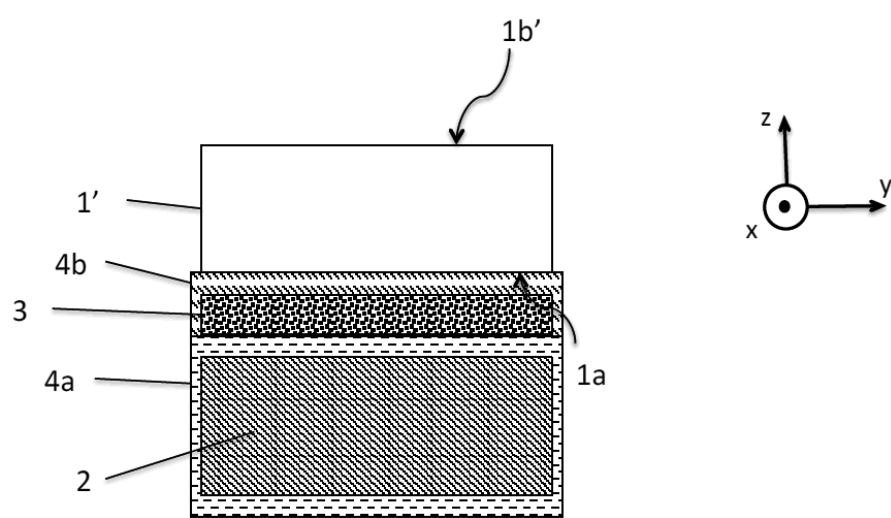


FIG.4d

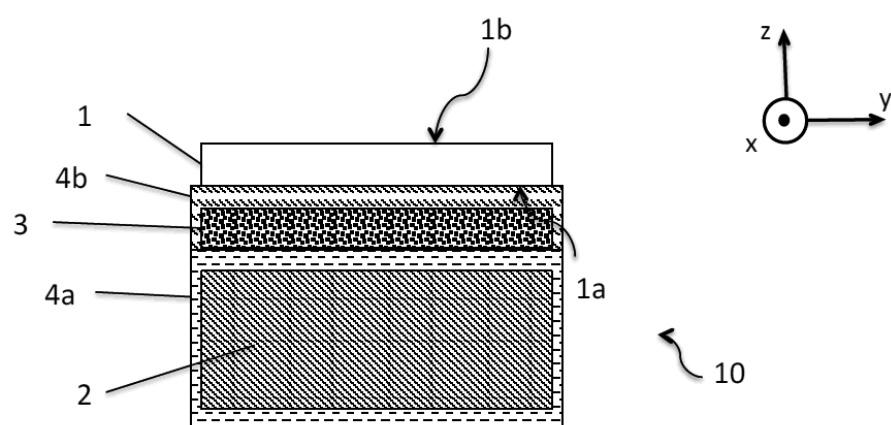


FIG.4e