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Fig. 1

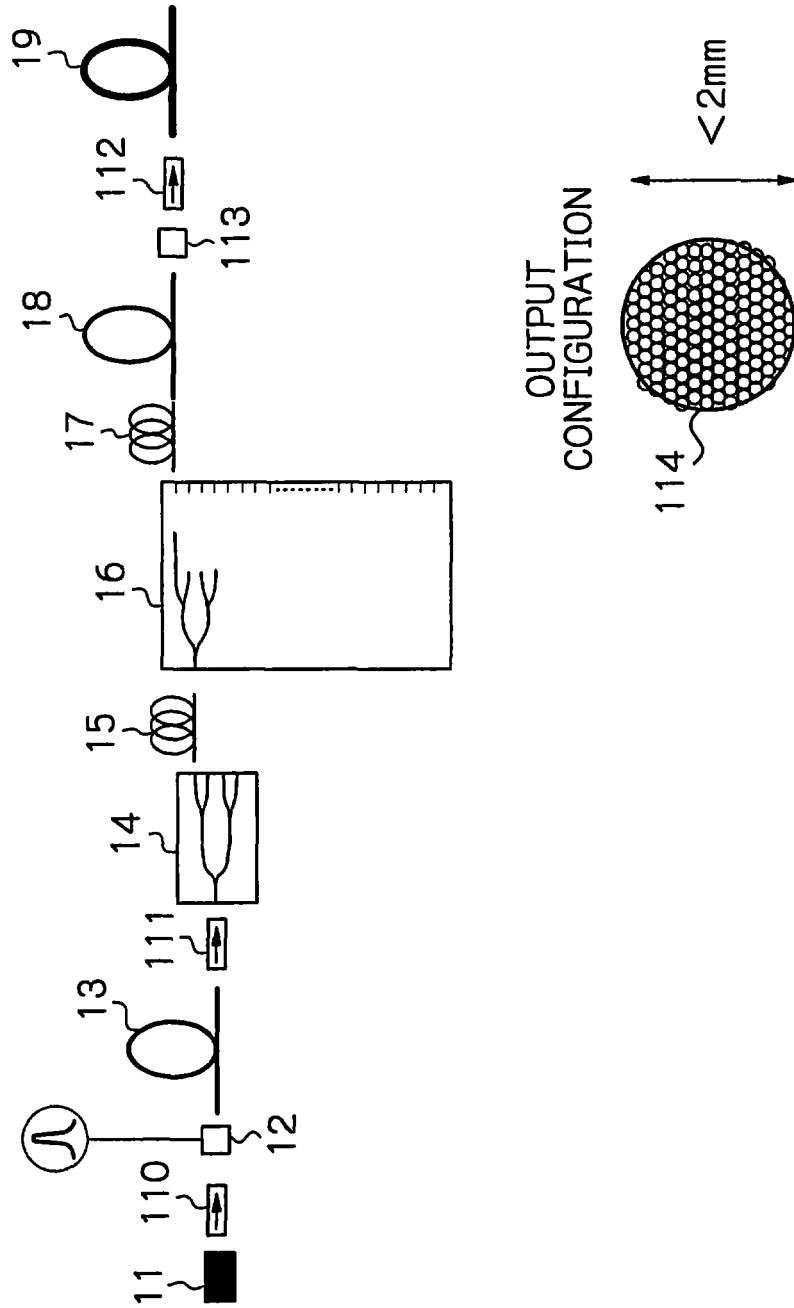


Fig. 2

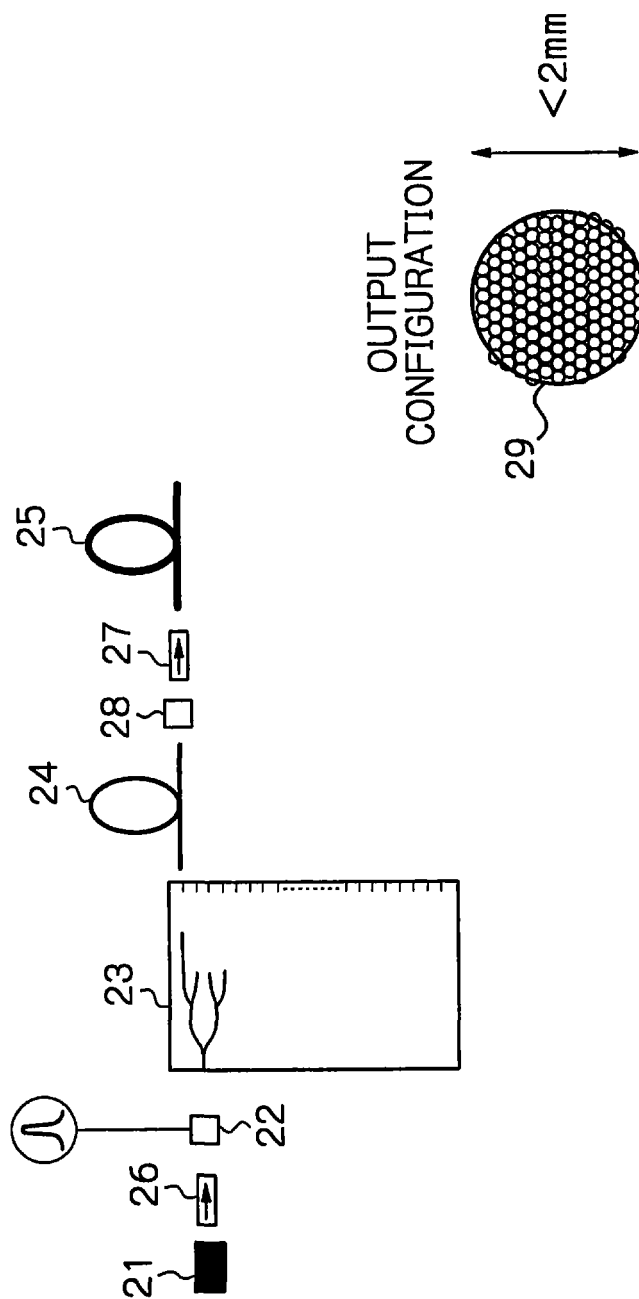


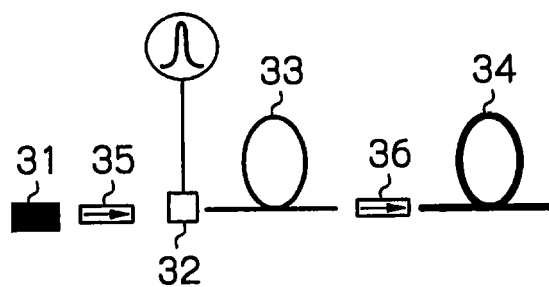
Fig. 3

Fig. 4

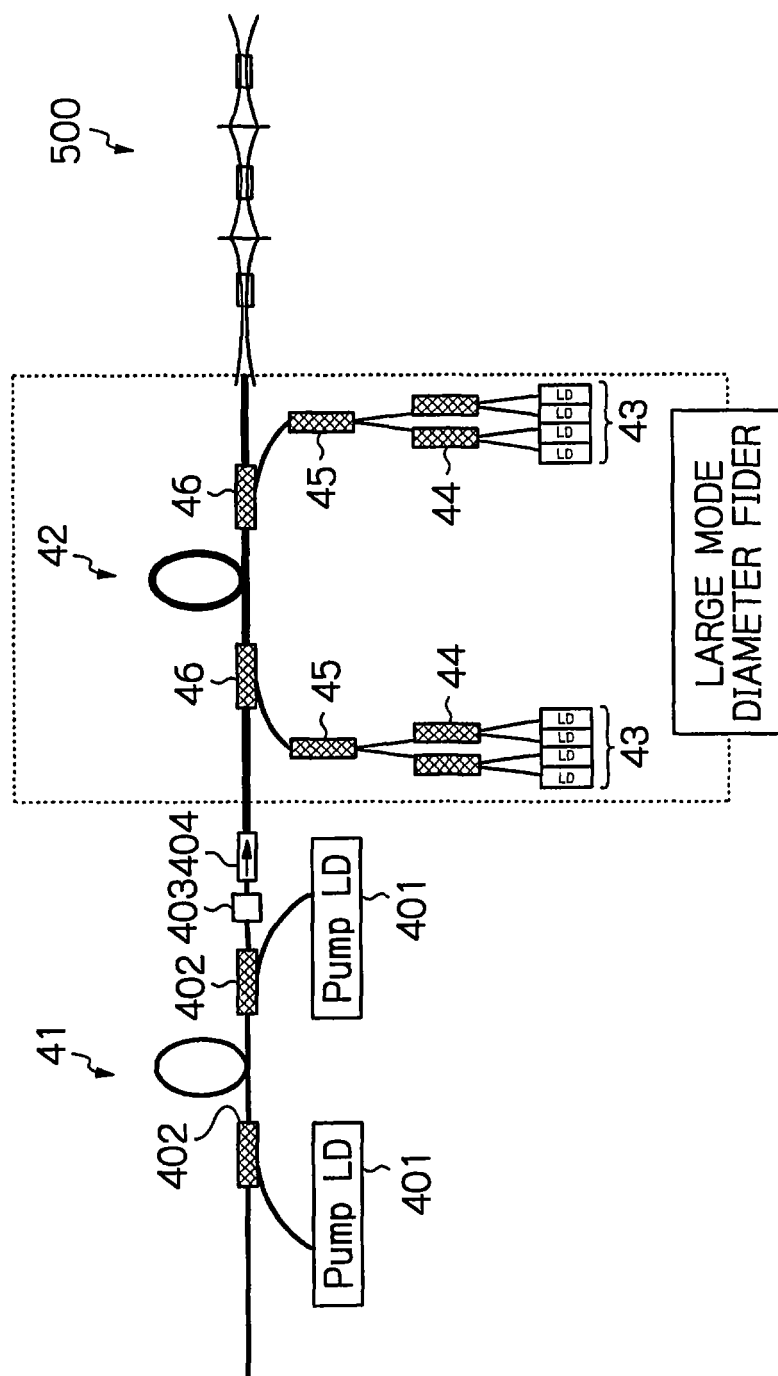


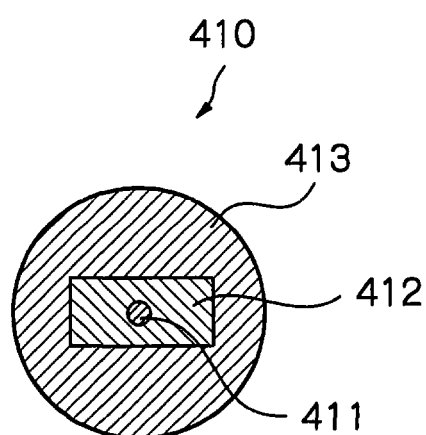
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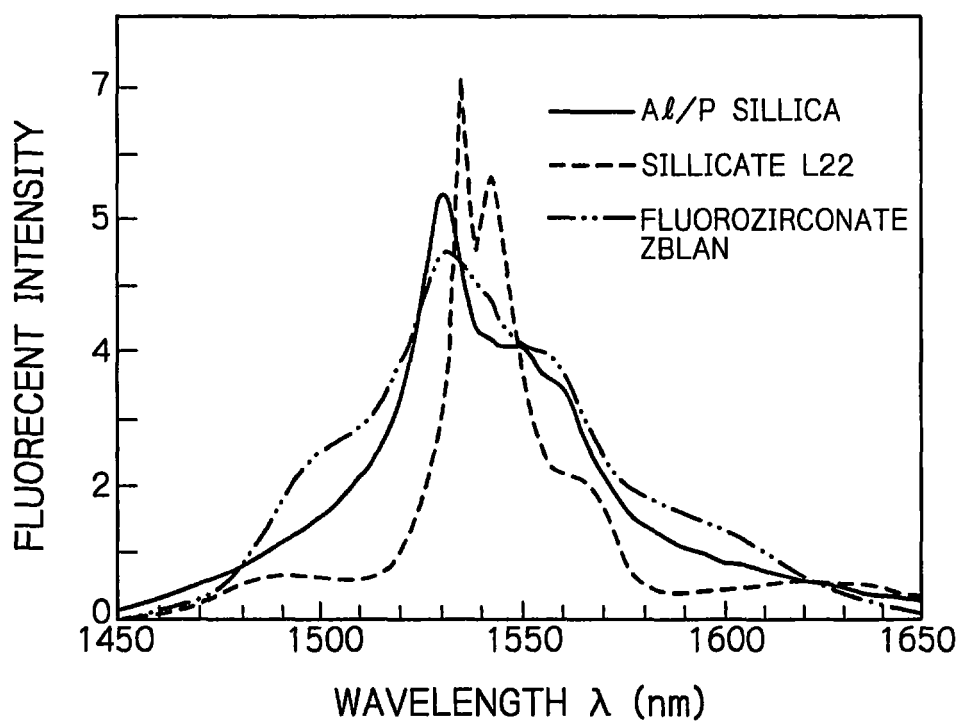
Fig. 6

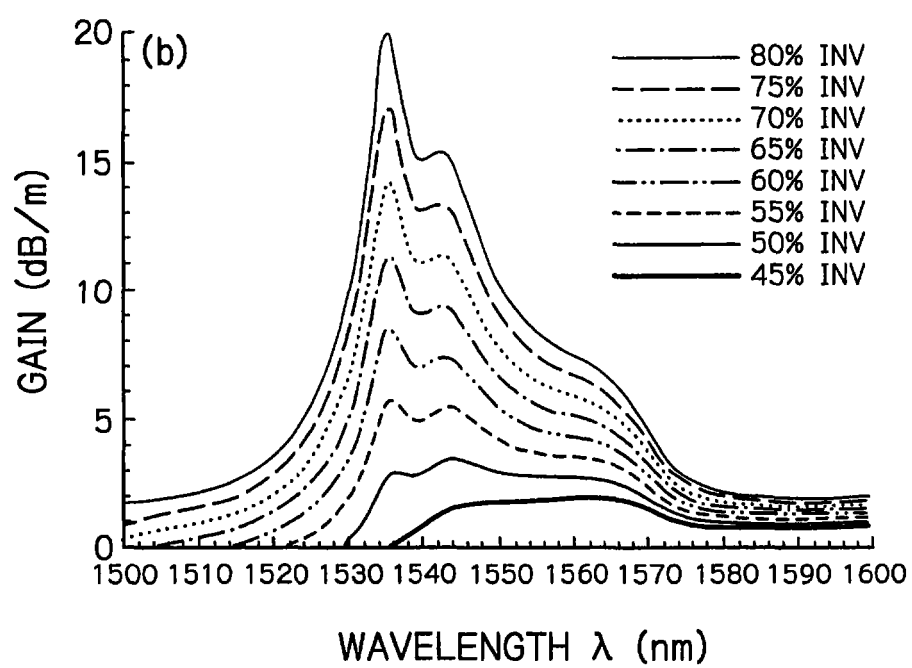
Fig. 7

Fig. 8

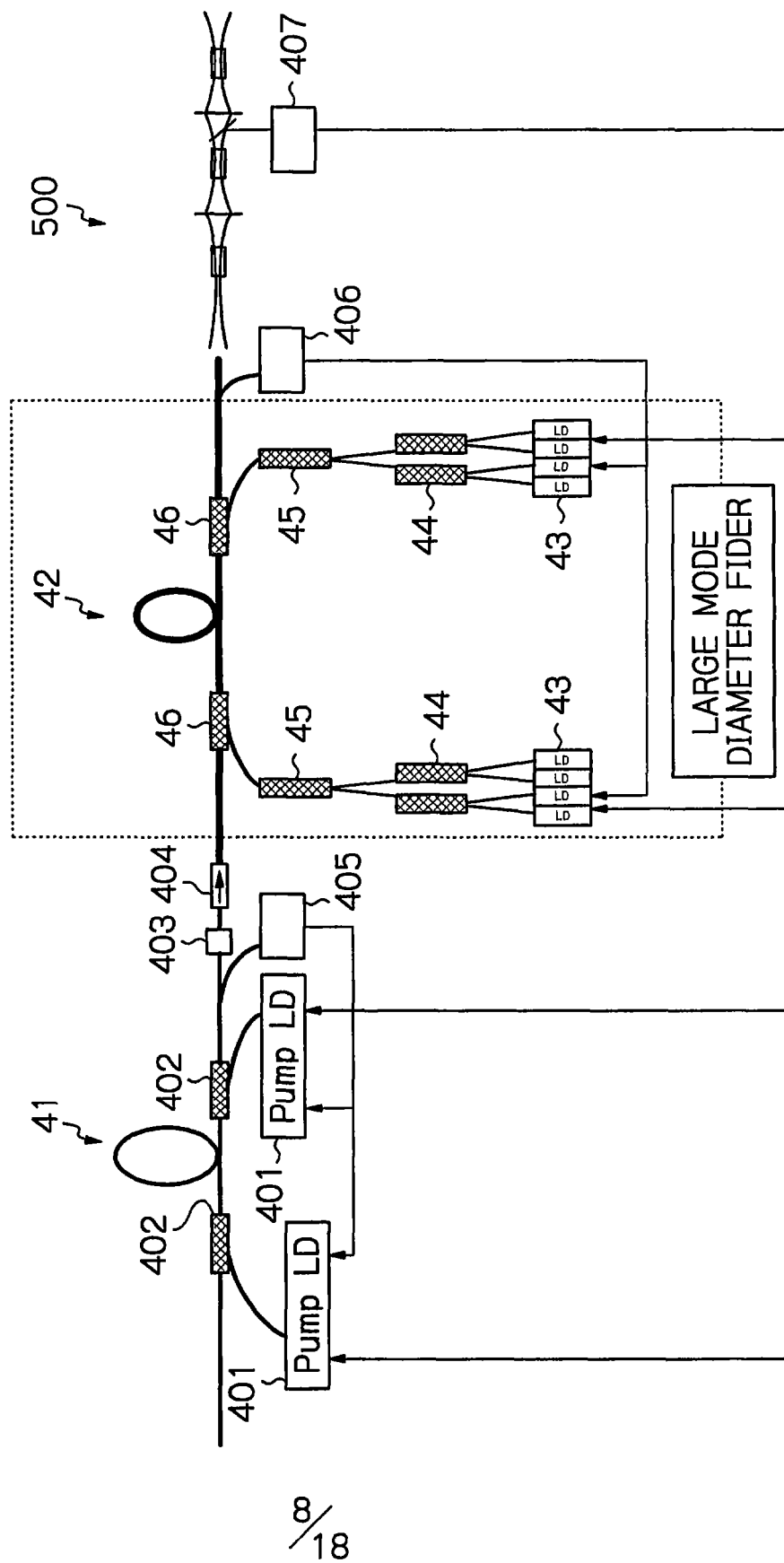


Fig. 9

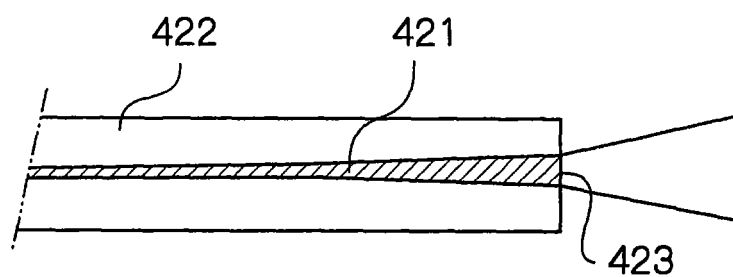


Fig. 10

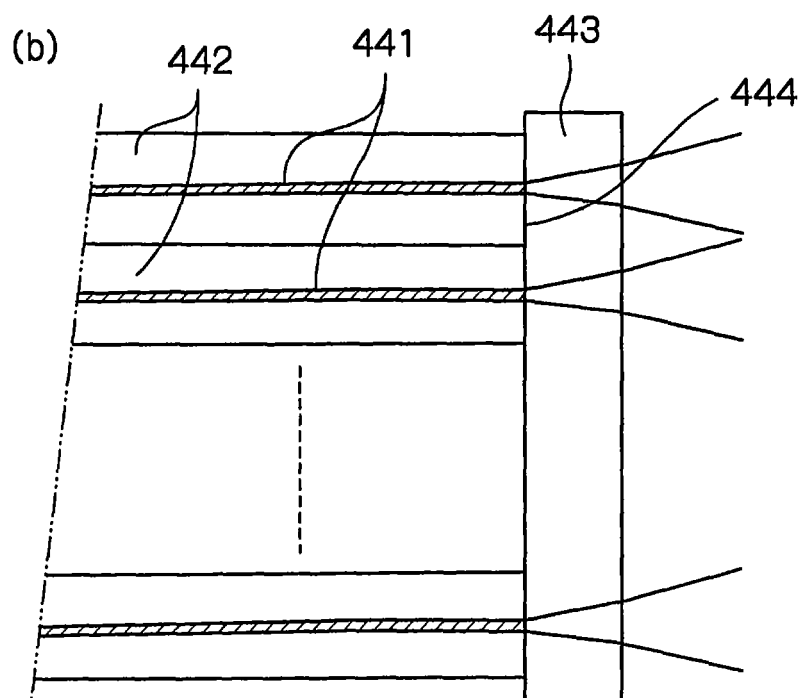
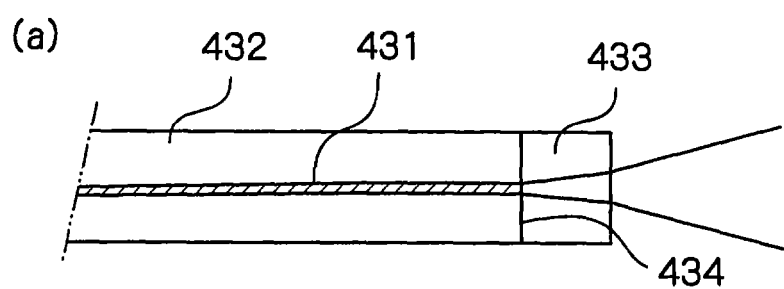


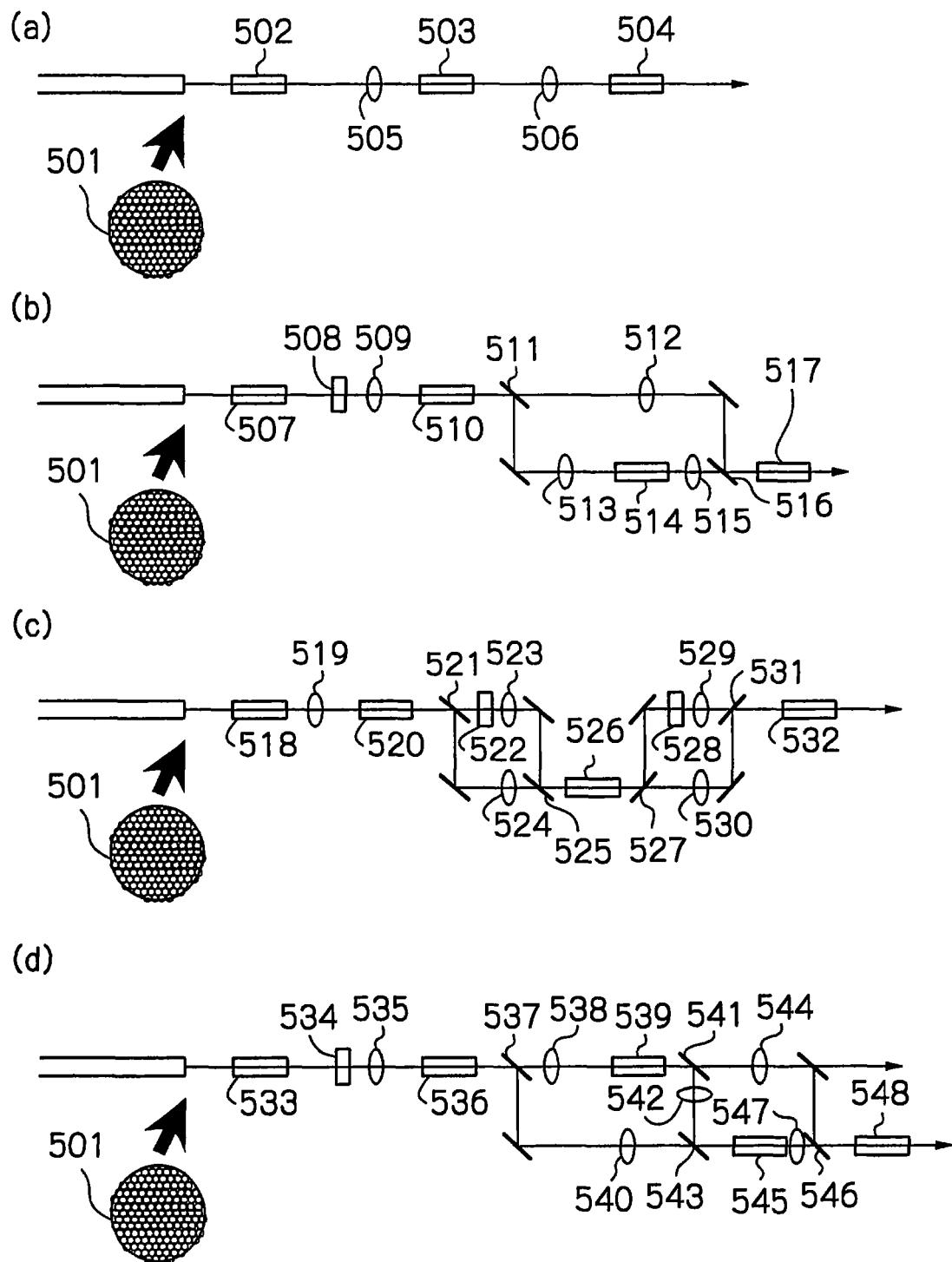
Fig. 11

Fig. 12

(a)

TYPE OF FREQUENCY CONVERSION	CRYSTAL	CONVERSION EFFICIENCY
$\omega + \omega \rightarrow 2\omega$	LBO	0.748
$2\omega + 2\omega \rightarrow 4\omega$	LBO	0.476
$4\omega + 4\omega \rightarrow 8\omega$	SBBO	0.321

OUTPUT WAVELENGTH 193nm, PEAK POWER : 2.29kW,
AVERAGE POWER @100kHz, 1ns : 229mW

(b)

TYPE OF FREQUENCY CONVERSION	CRYSTAL	CONVERSION EFFICIENCY
$\omega + \omega \rightarrow 2\omega$	LBO	0.611
$\omega + 2\omega \rightarrow 3\omega$	LBO	0.909
$3\omega + 3\omega \rightarrow 6\omega$	BBO	0.307
$2\omega + 6\omega \rightarrow 8\omega$	BBO	0.177

OUTPUT WAVELENGTH 193nm, PEAK POWER : 383W,
AVERAGE POWER @100kHz, 1ns : 38.3mW

(c)

TYPE OF FREQUENCY CONVERSION	CRYSTAL	CONVERSION EFFICIENCY
$\omega + \omega \rightarrow 2\omega$	LBO	0.748
$2\omega + 2\omega \rightarrow 4\omega$	LBO	0.476
$2\omega + 4\omega \rightarrow 6\omega$	BBO	0.308
$2\omega + 6\omega \rightarrow 8\omega$	BBO	0.184

OUTPUT WAVELENGTH 193nm, PEAK POWER : 403W,
AVERAGE POWER @100kHz, 1ns : 40.3mW

(d)

TYPE OF FREQUENCY CONVERSION	CRYSTAL	CONVERSION EFFICIENCY
$\omega + \omega \rightarrow 2\omega$	LBO	0.633
$\omega + 2\omega \rightarrow 3\omega$	LBO	0.826
$2\omega + 2\omega \rightarrow 4\omega$	LBO	0.322
$2\omega + 4\omega \rightarrow 7\omega$	BBO	0.302
$\omega + 7\omega \rightarrow 8\omega$	LBO	0.251

OUTPUT WAVELENGTH 193nm, PEAK POWER : 459W,
AVERAGE POWER @100kHz, 1ns : 45.9mW

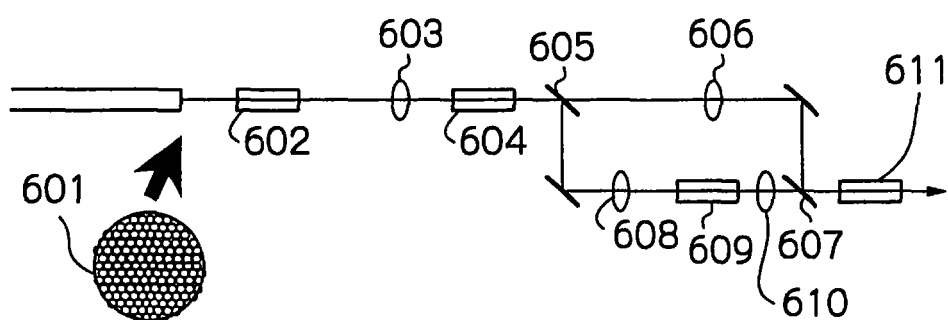
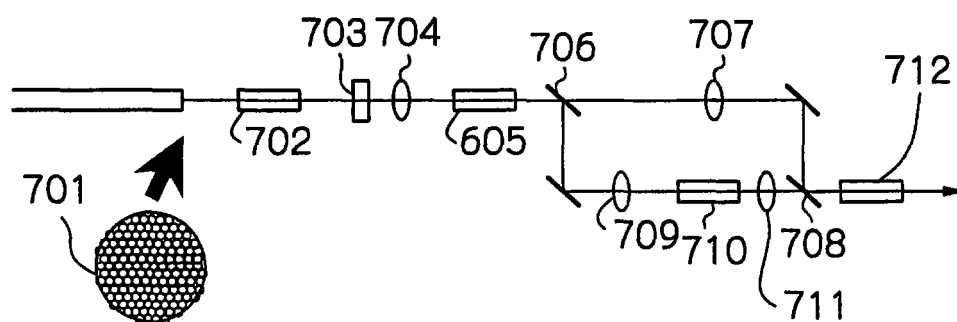
Fig. 13*Fig. 14*

Fig. 15

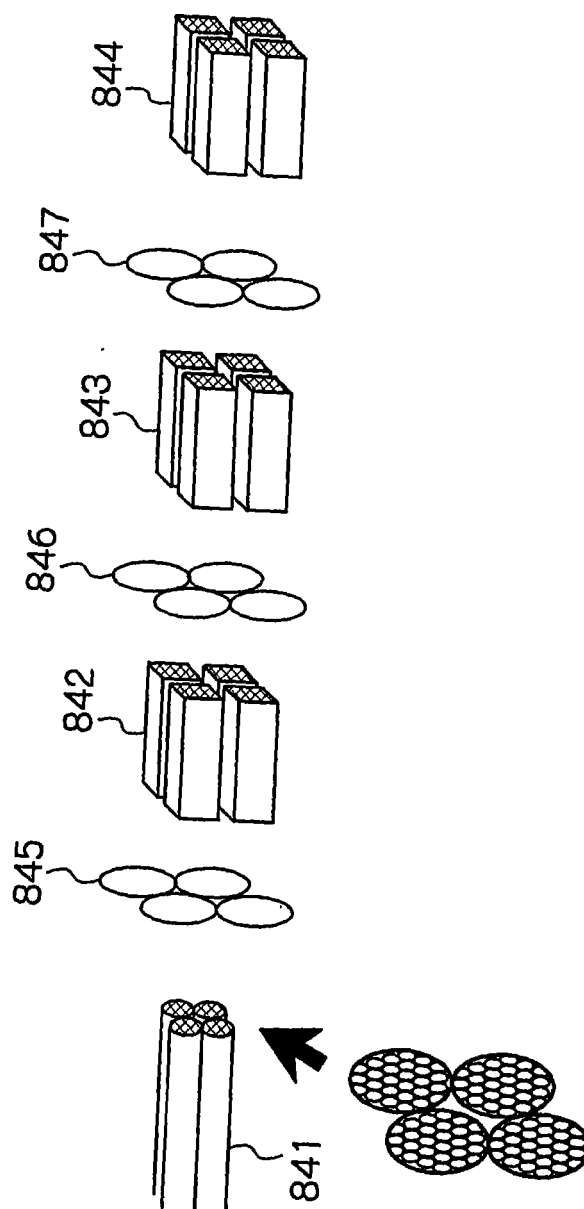


Fig. 16

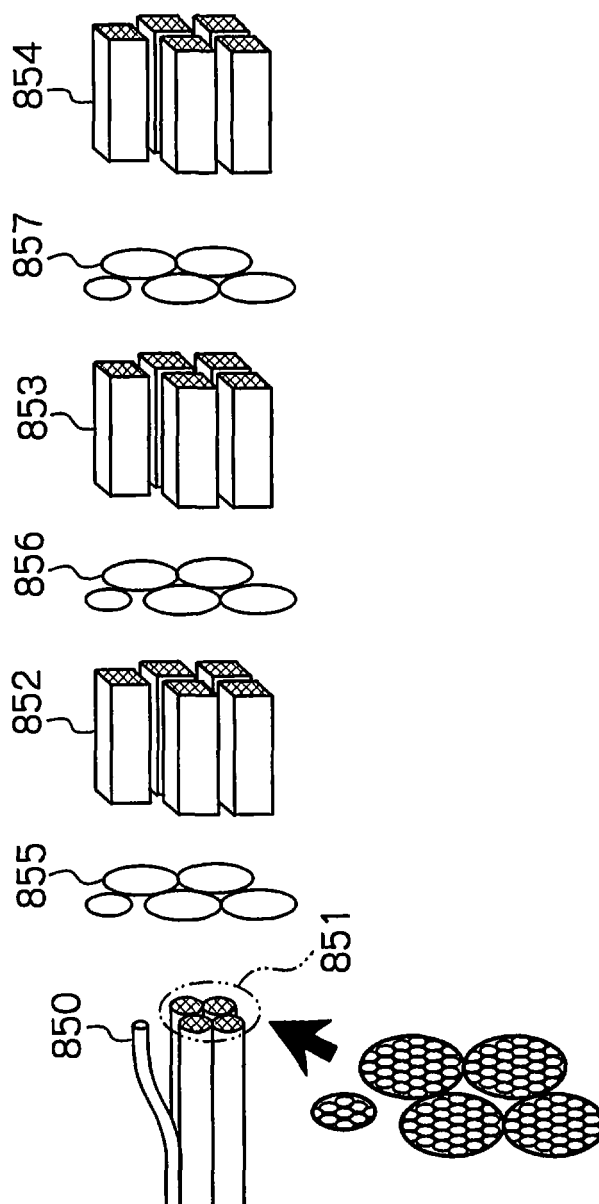


Fig. 17

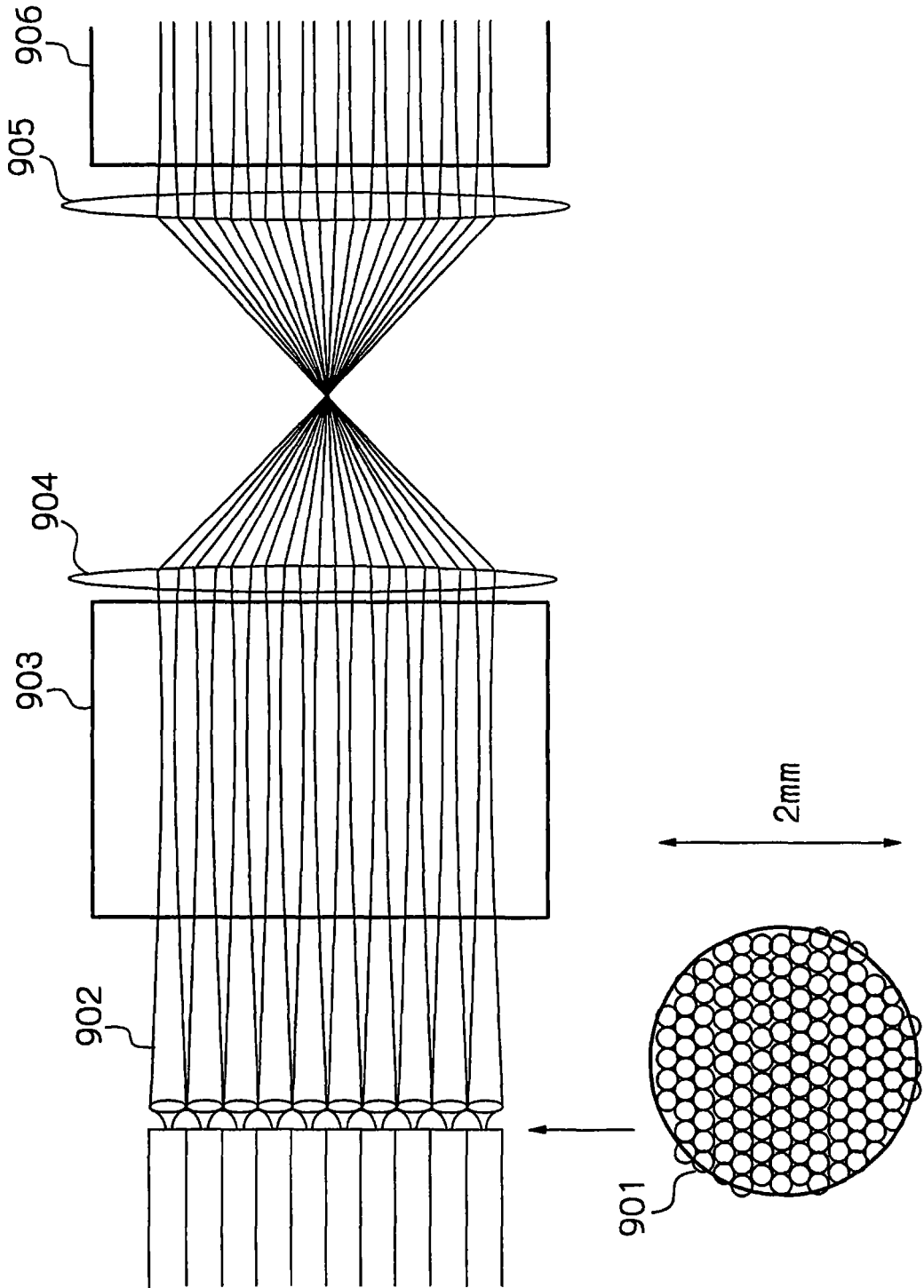
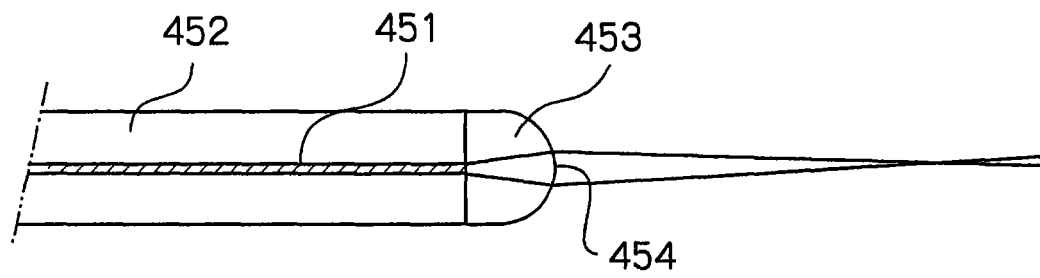
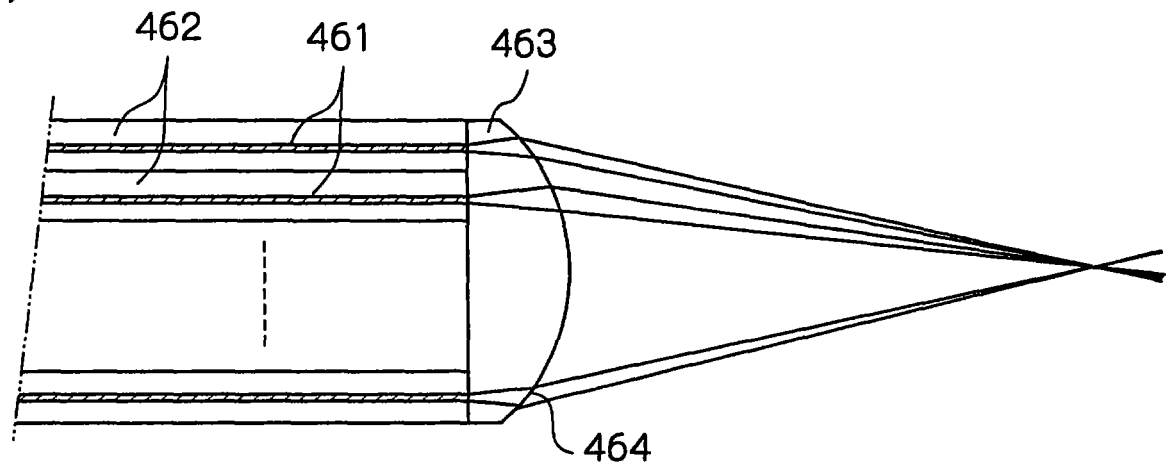


Fig. 18

(a)



(b)



(c)

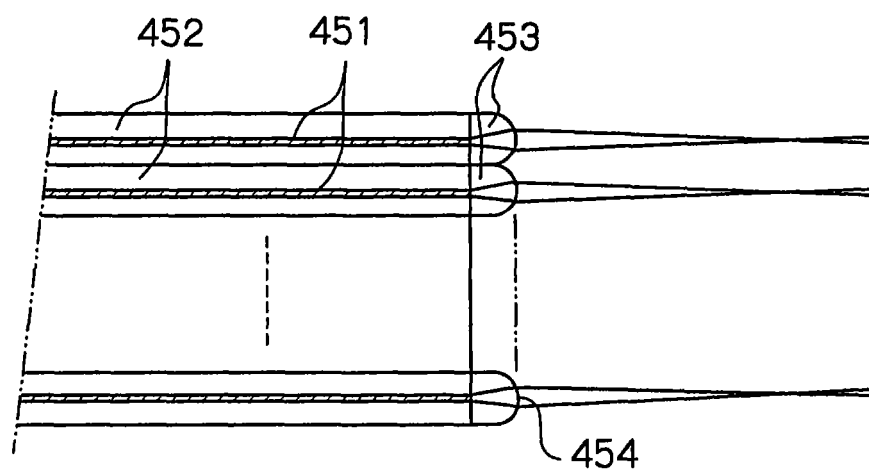


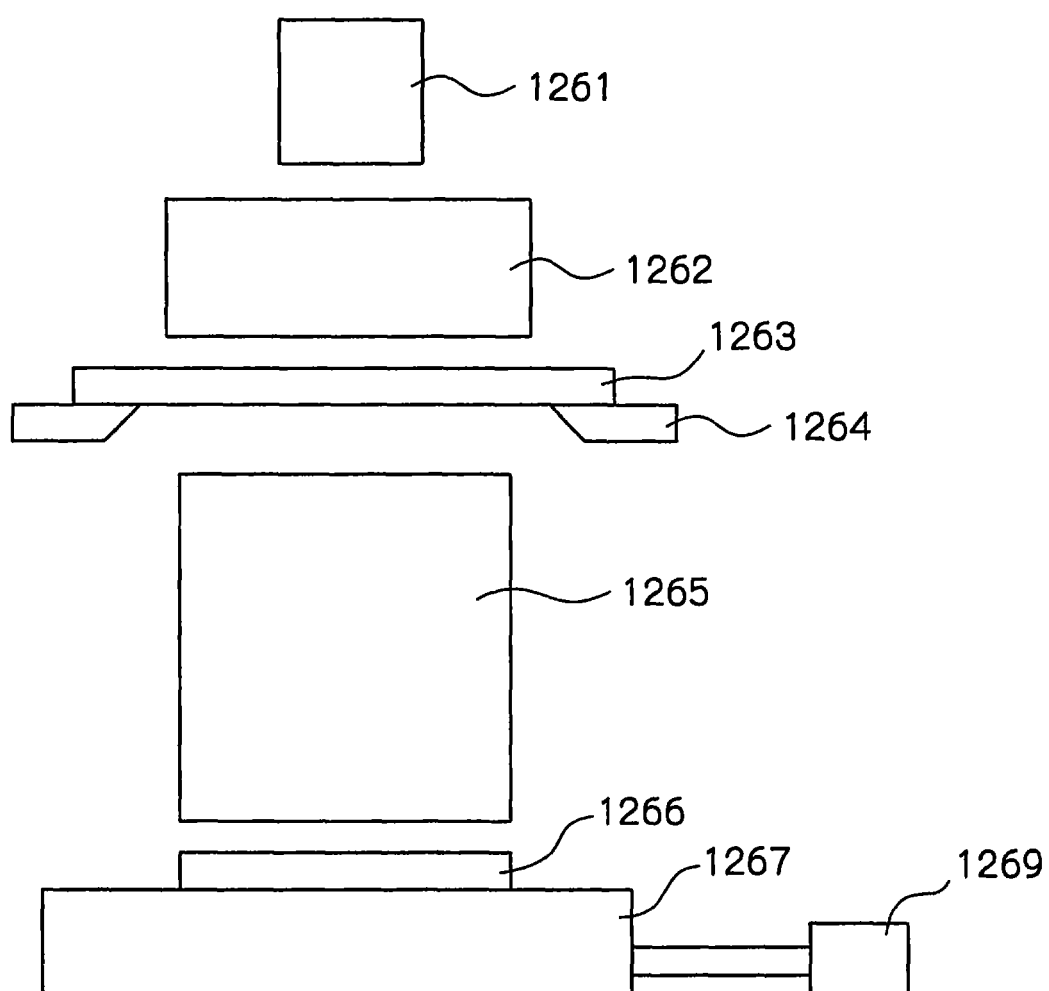
Fig. 19

Fig. 20

