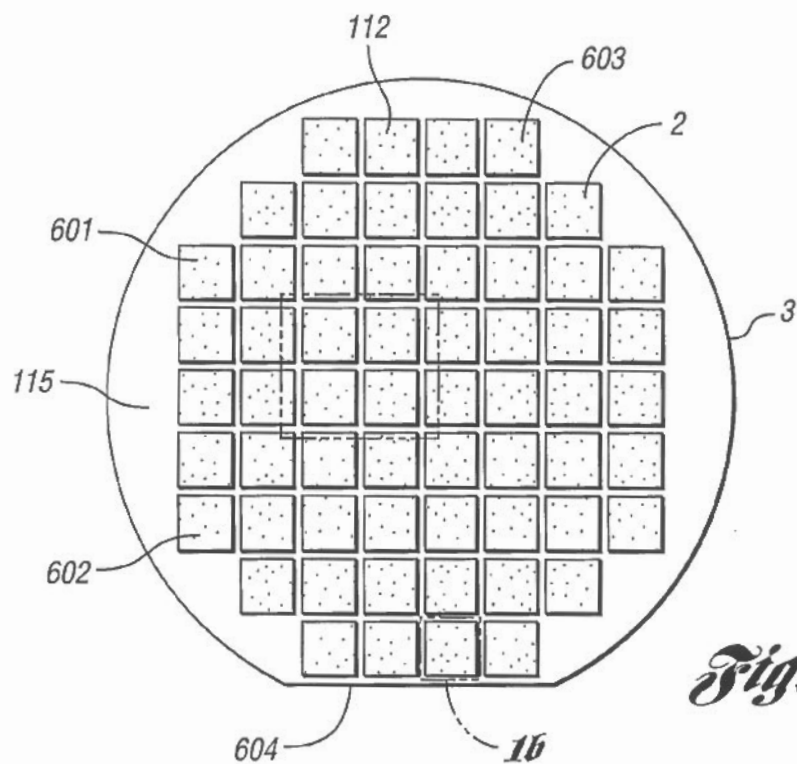
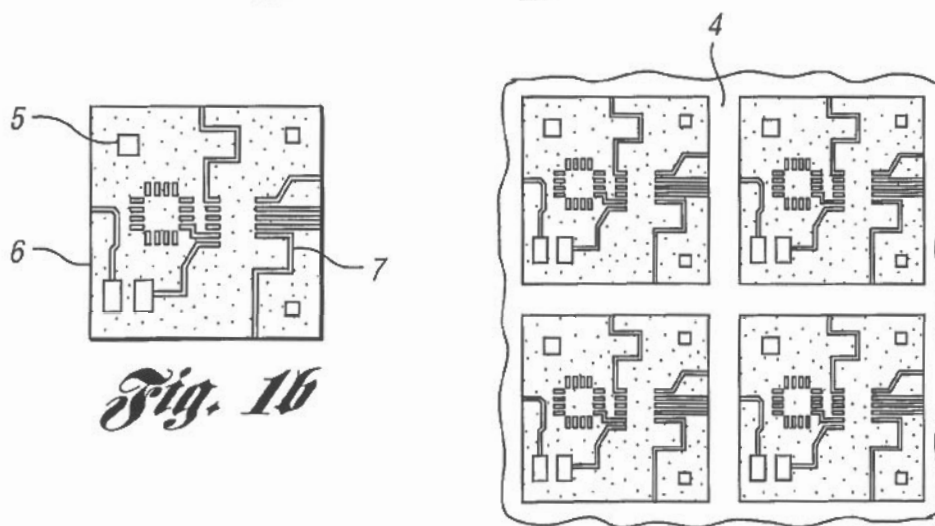
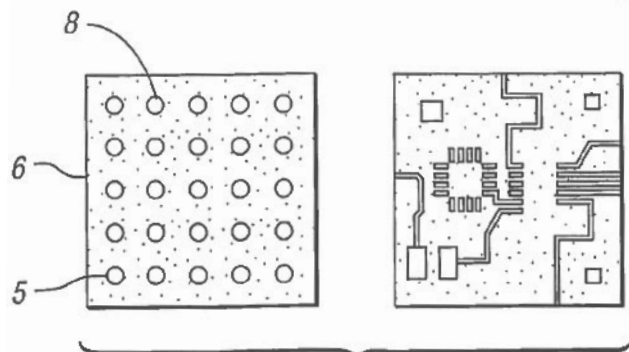


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*Fig. 1a**Fig. 1b**Fig. 1c**Fig. 1d*

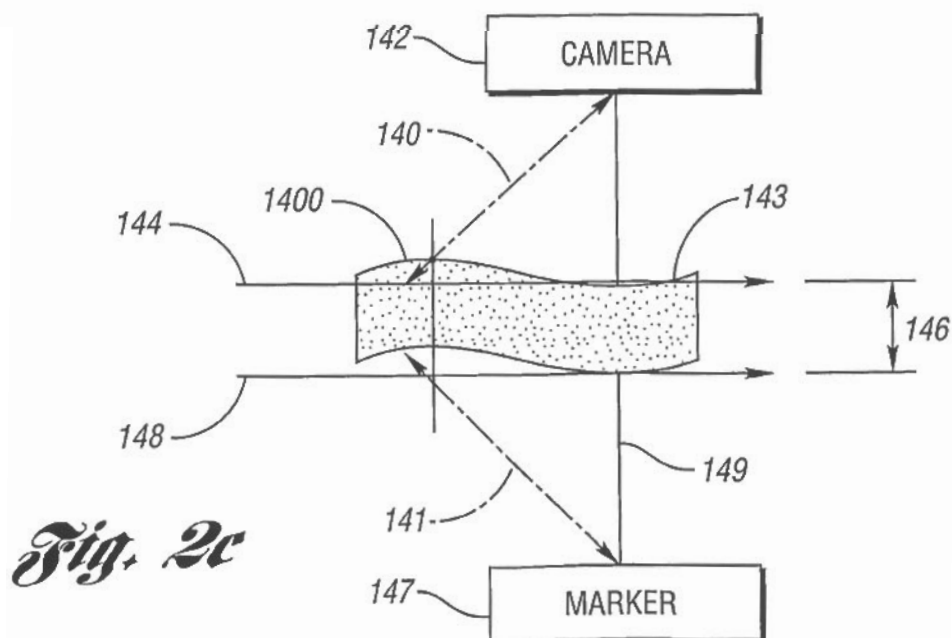
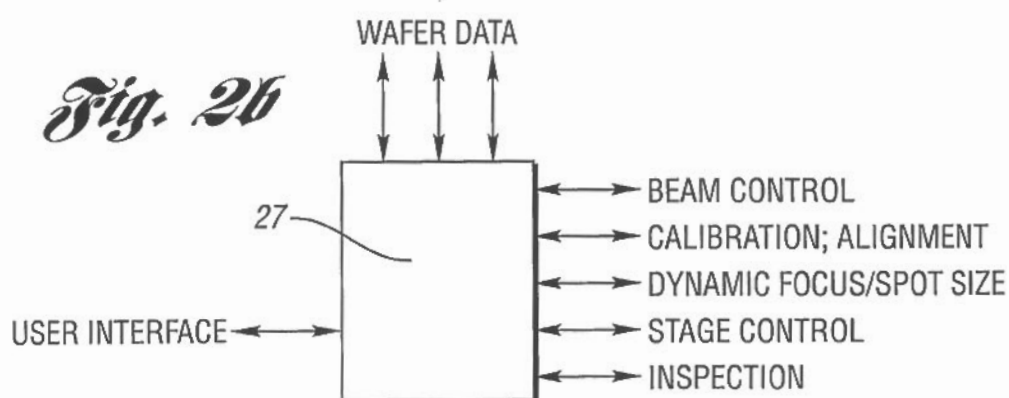
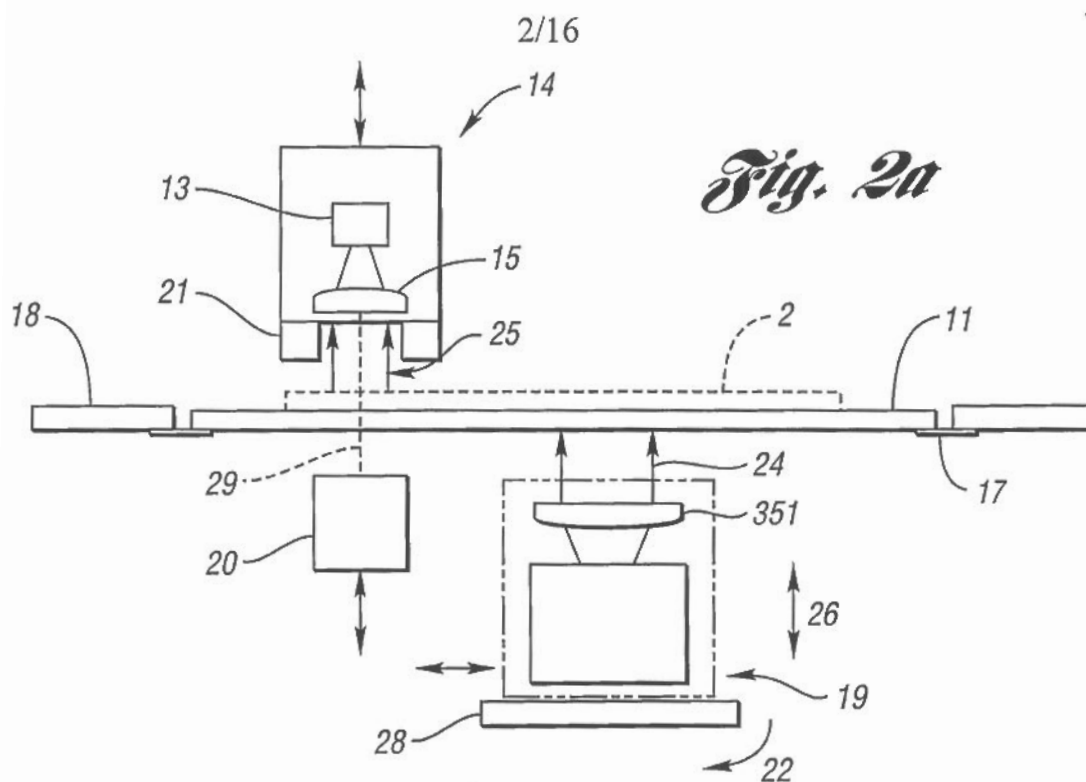
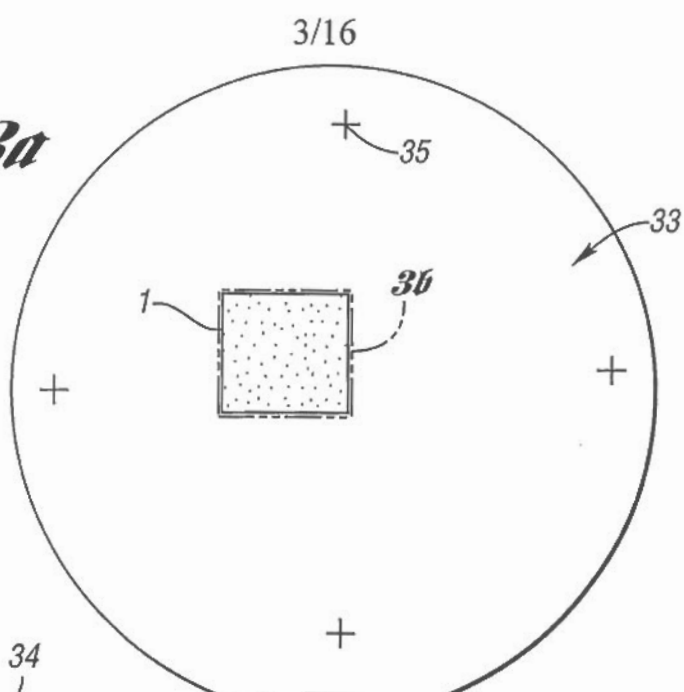
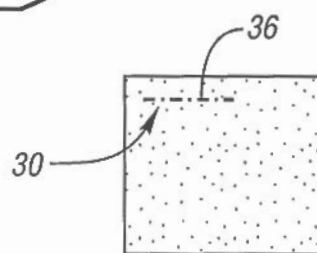
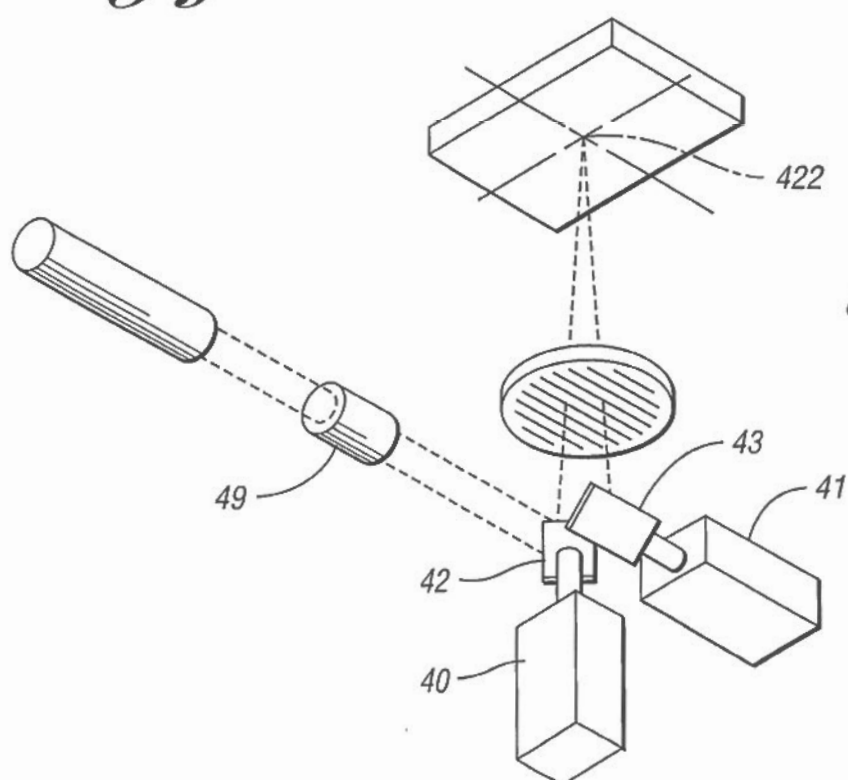


Fig. 3a*Fig. 3b**Fig. 3c**Fig. 4*

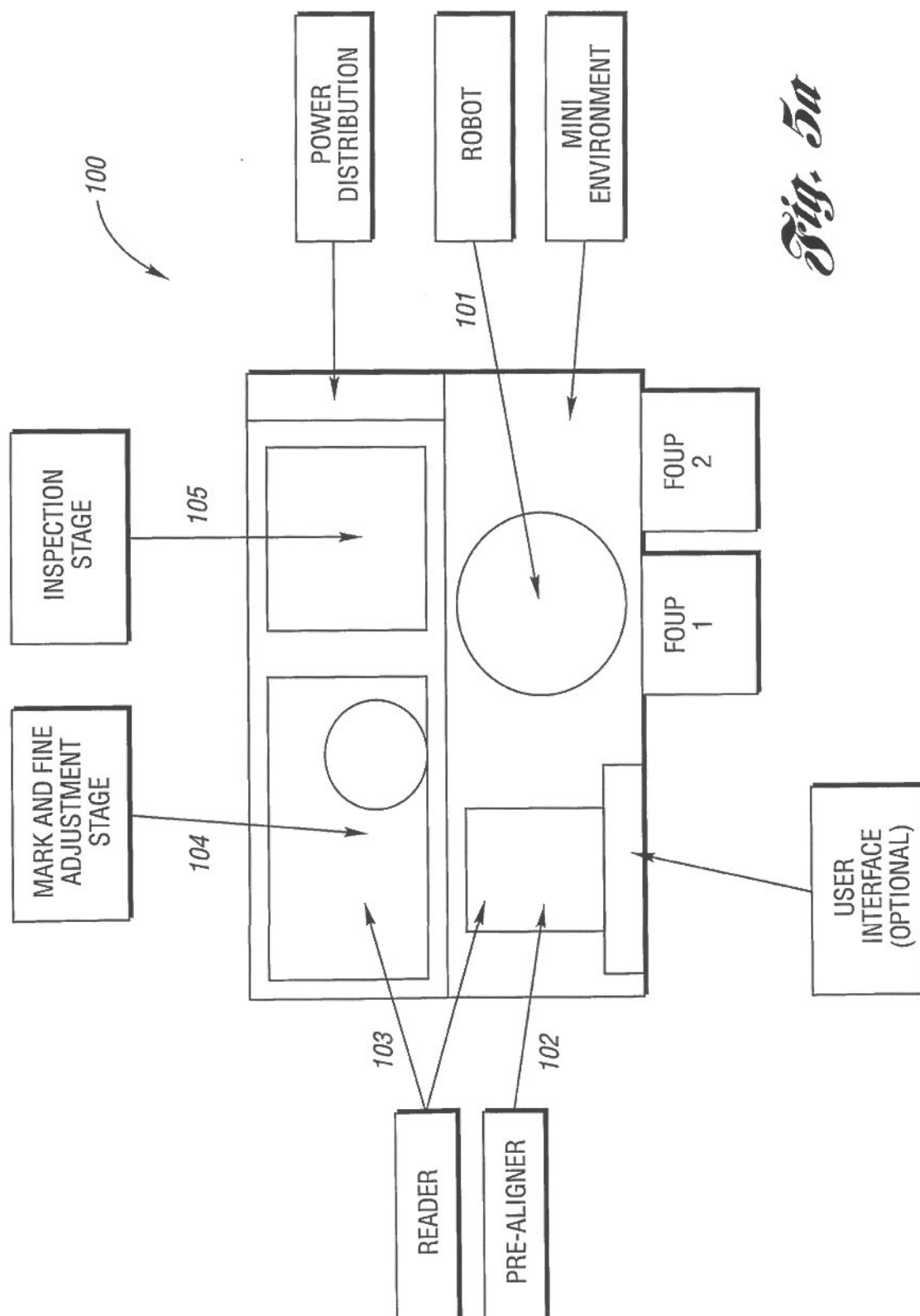


Fig. 5a

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First Wafer

Open FOUP
 Map Wafers
 Wafer move to Pre Aligner
 Pre Align
 Rotate to OCR position
 Wafer ID Read, Decode
 Build Mark File
 Wafer Move to XY Stage
 Wafer held by Chuck
 Close Laser Door
 Fine Adjustment
 (3) XY Move
 (3) Frame Grab
 Image Process
 (16) Marking
 XY Focus
 Focus
 Mark
 Wafer Release by Chuck
 Wafer Move to FOUP

Second Wafer

Wafer move to Pre Aligner
 Pre Align
 Rotate to OCR position
 Wafer ID Read, Decode
 Build Mark File

WAIT

Wafer Move to XY Stage
 Wafer held by Chuck
 Close Laser Door
 Fine Adjustment
 (3) XY Move
 (3) Frame Grab
 Image Process
 (16) Marking
 XY Focus
 Focus
 Mark
 Wafer Release by Chuck
 Wafer Move to FOUP

....Next Wafer....

Wafer move to Pre Aligner
 Pre Align
 Rotate to OCR position
 Wafer ID Read, Decode
 Build Mark File

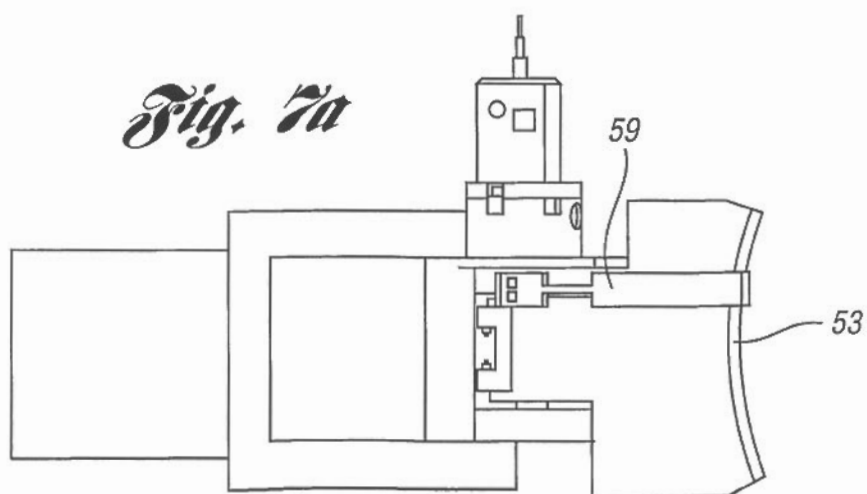
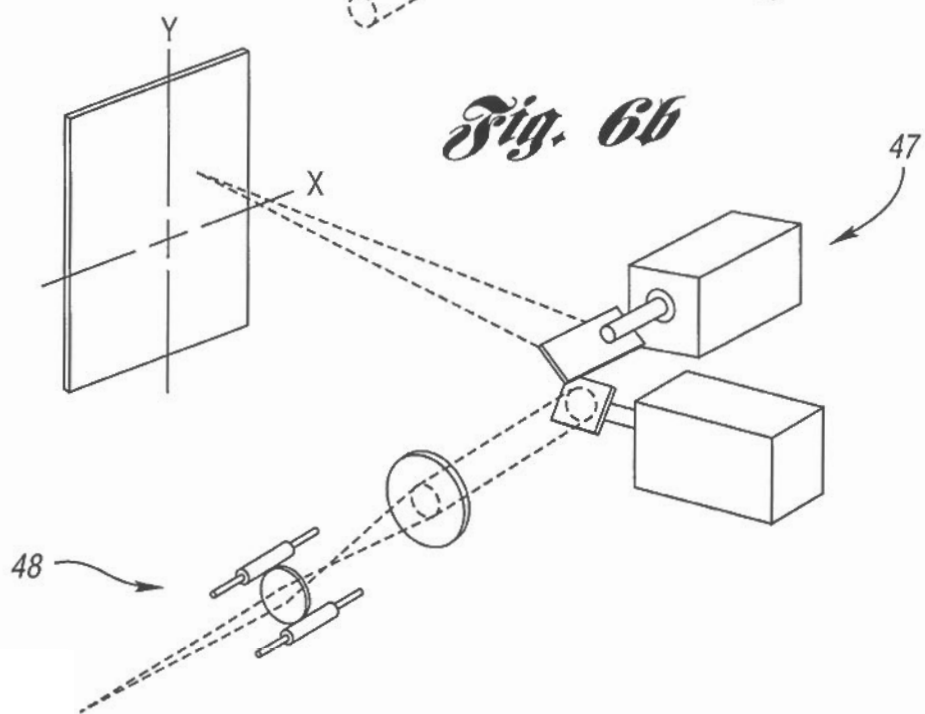
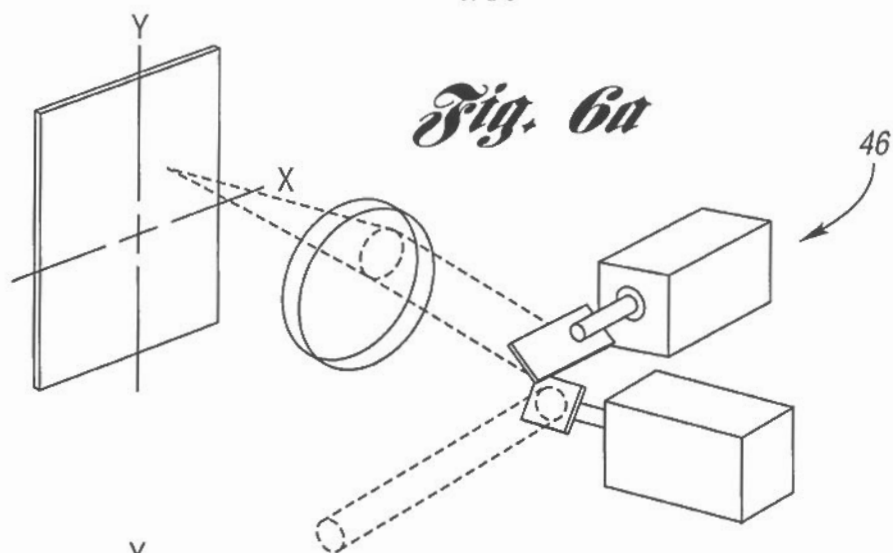
WAIT

Wafer Move to XY Stage
 Wafer held by Chuck
 Close Laser Door
 Fine Adjustment
 (3) XY Move
 (3) Frame Grab
 Image Process
 (16) Marking
 XY Focus
 Focus
 Mark
 Wafer Release by Chuck
 Wafer Move to FOUP

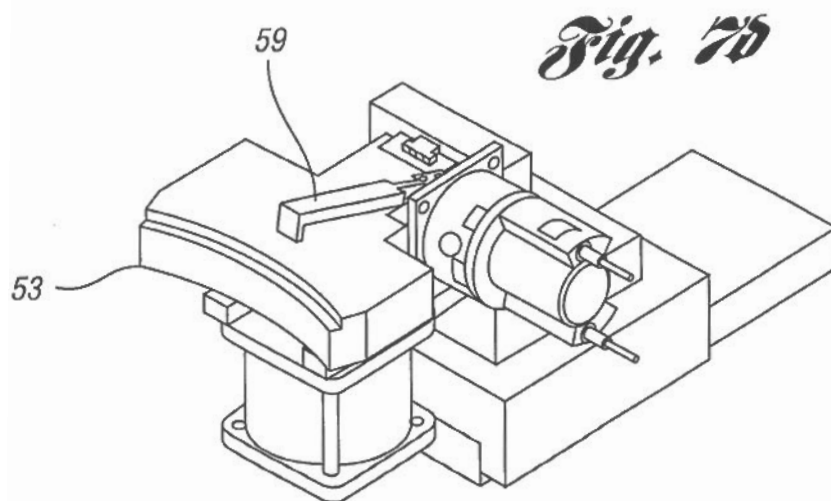
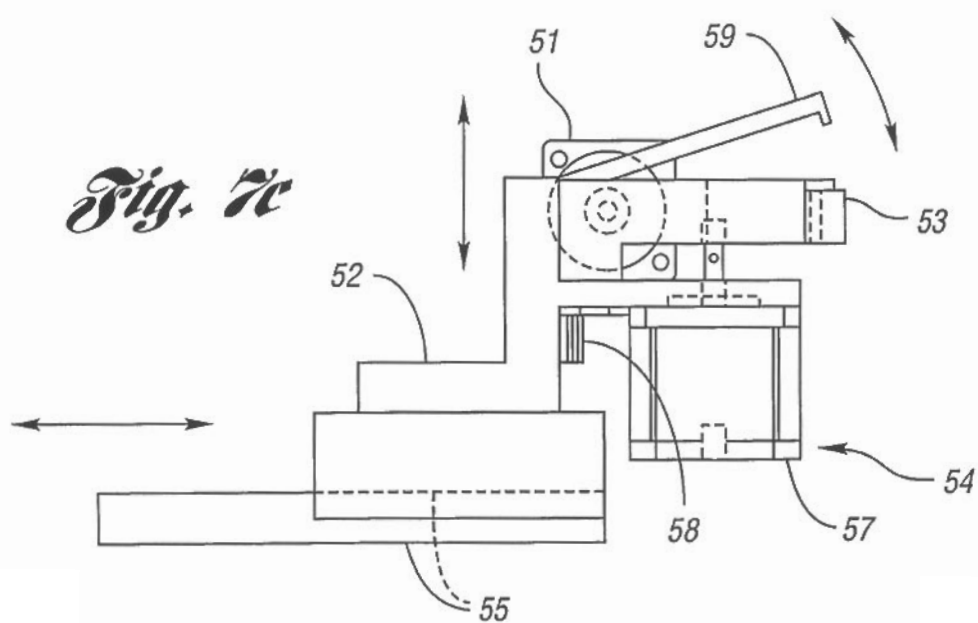
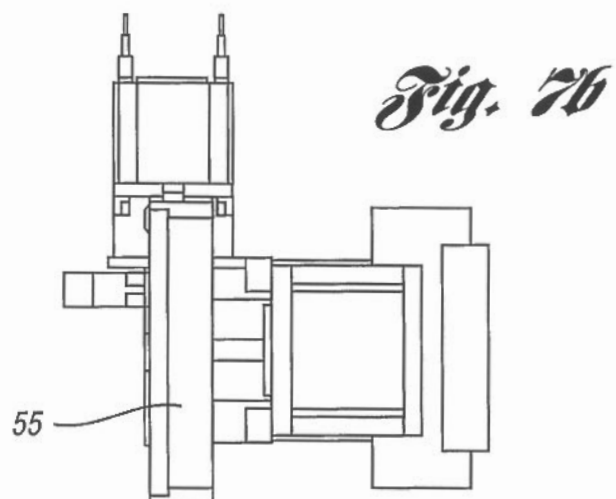
TIME

Fig. 5b

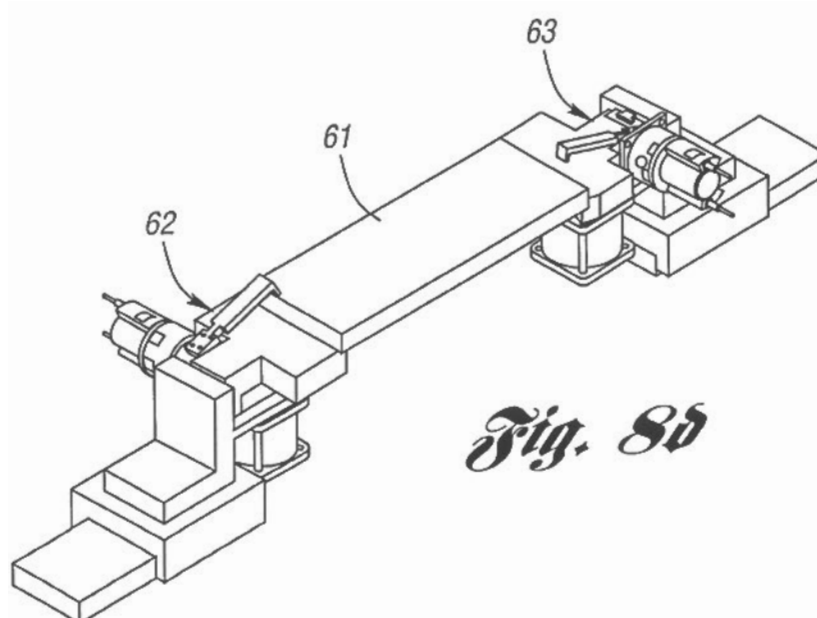
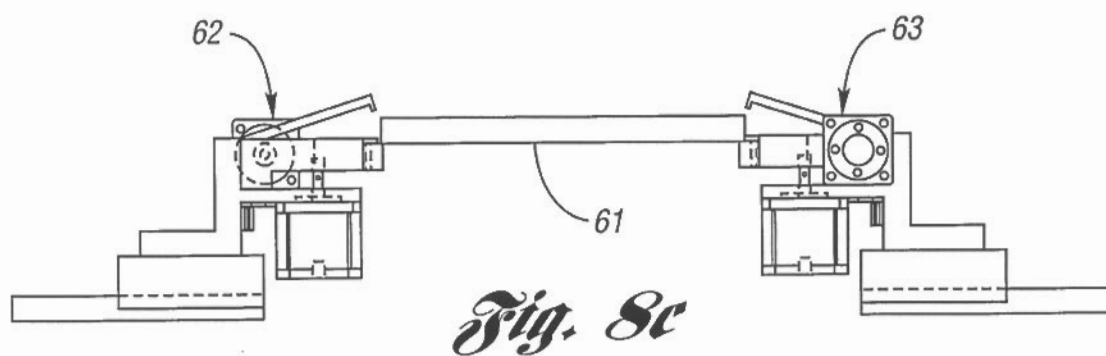
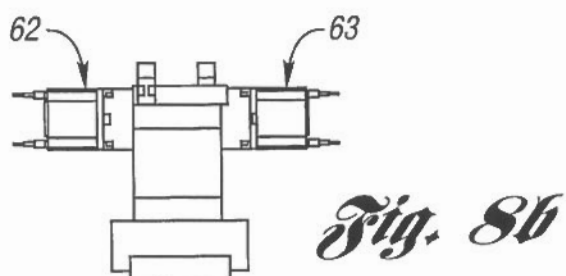
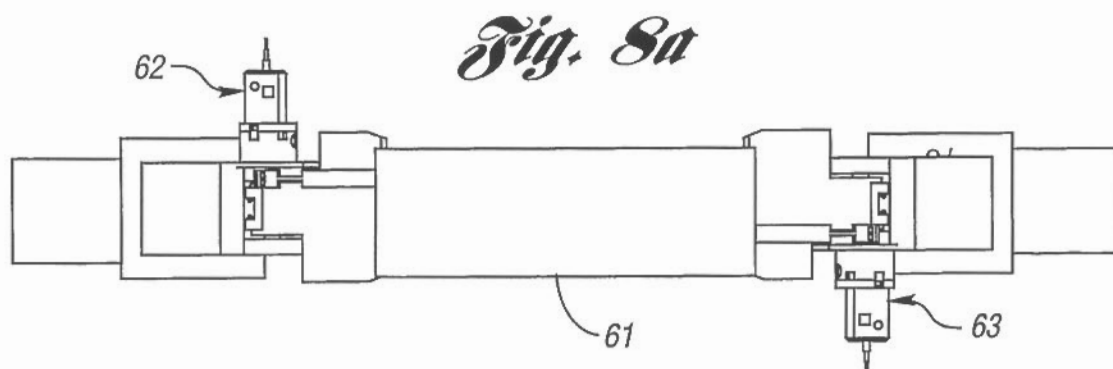
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Fig. 9a

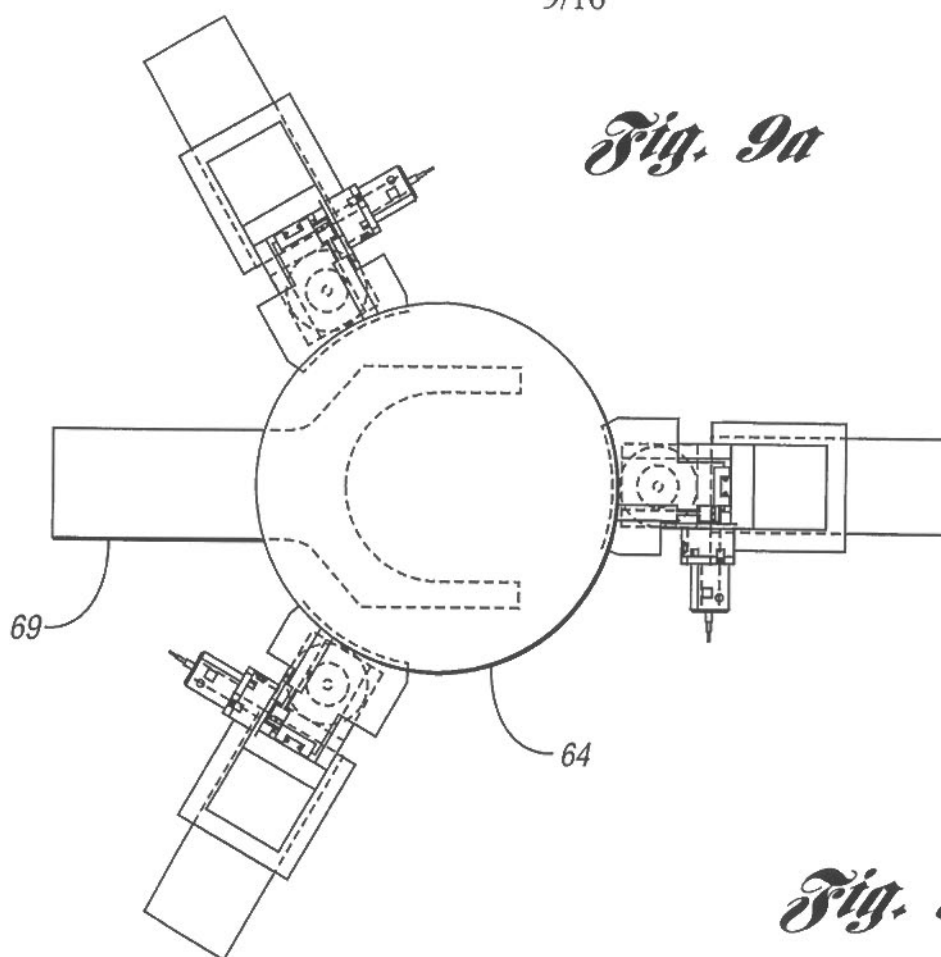


Fig. 9b

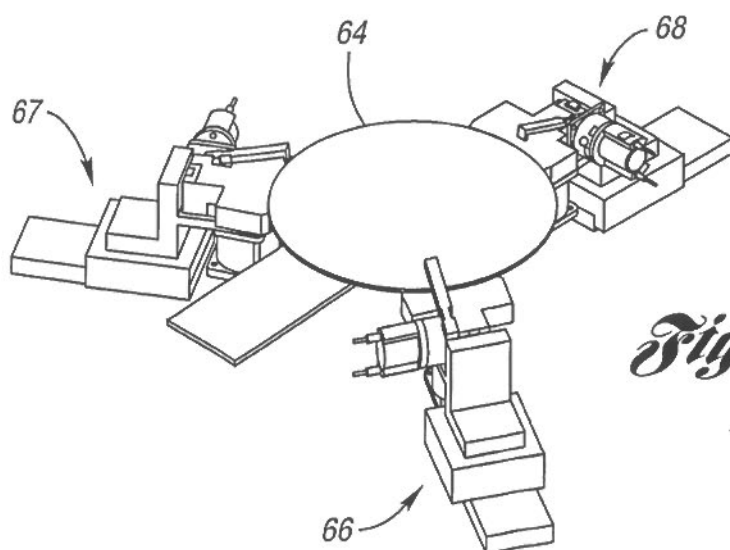
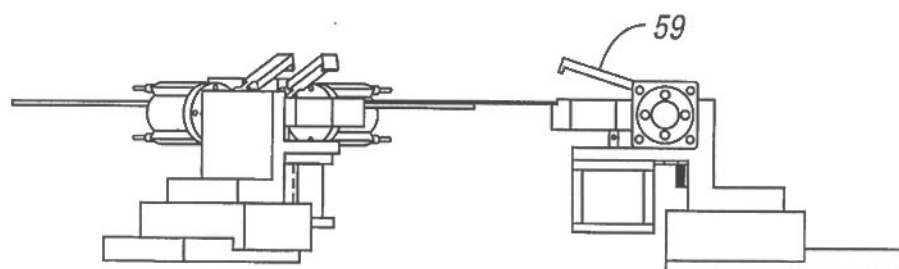
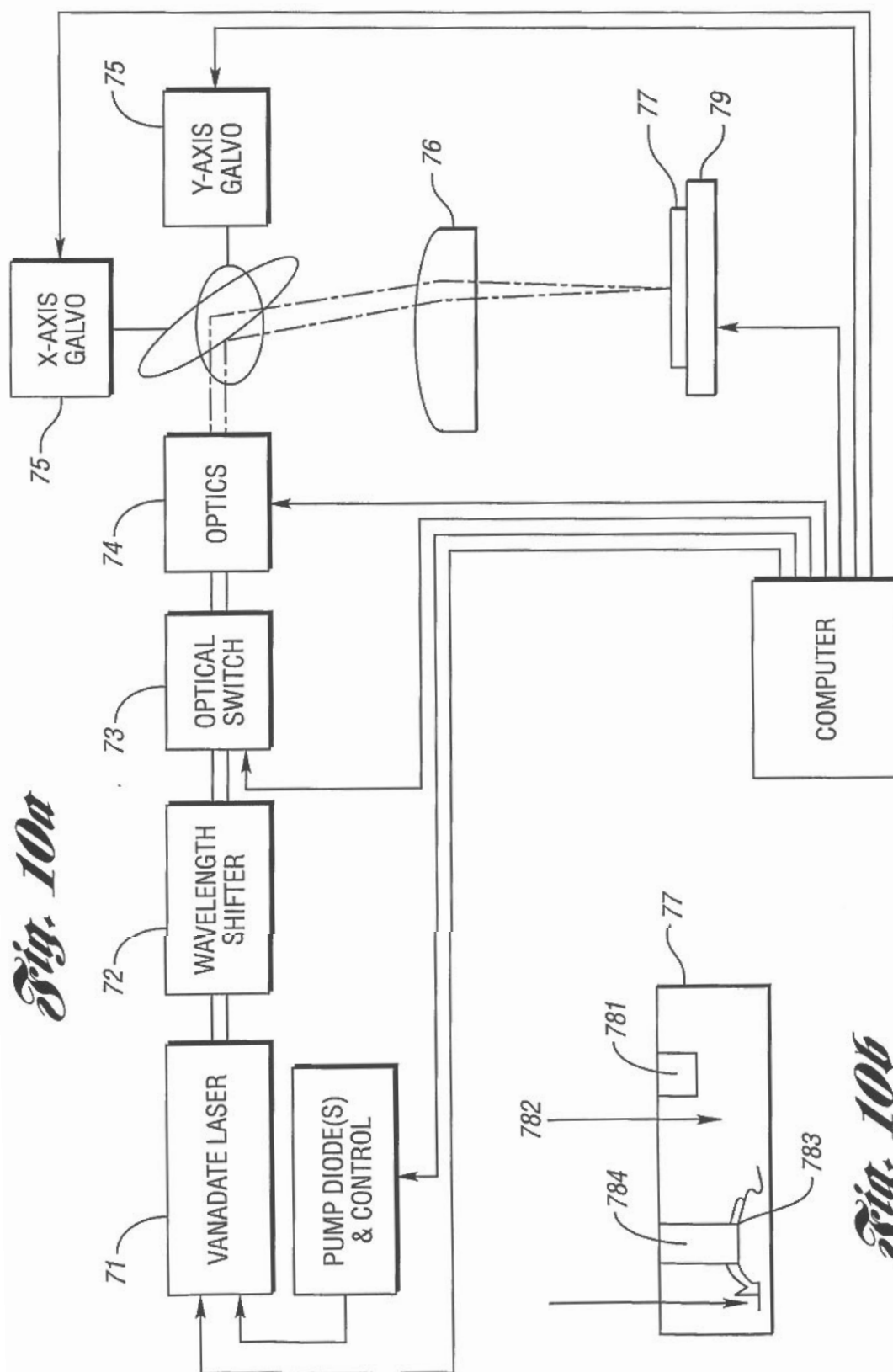
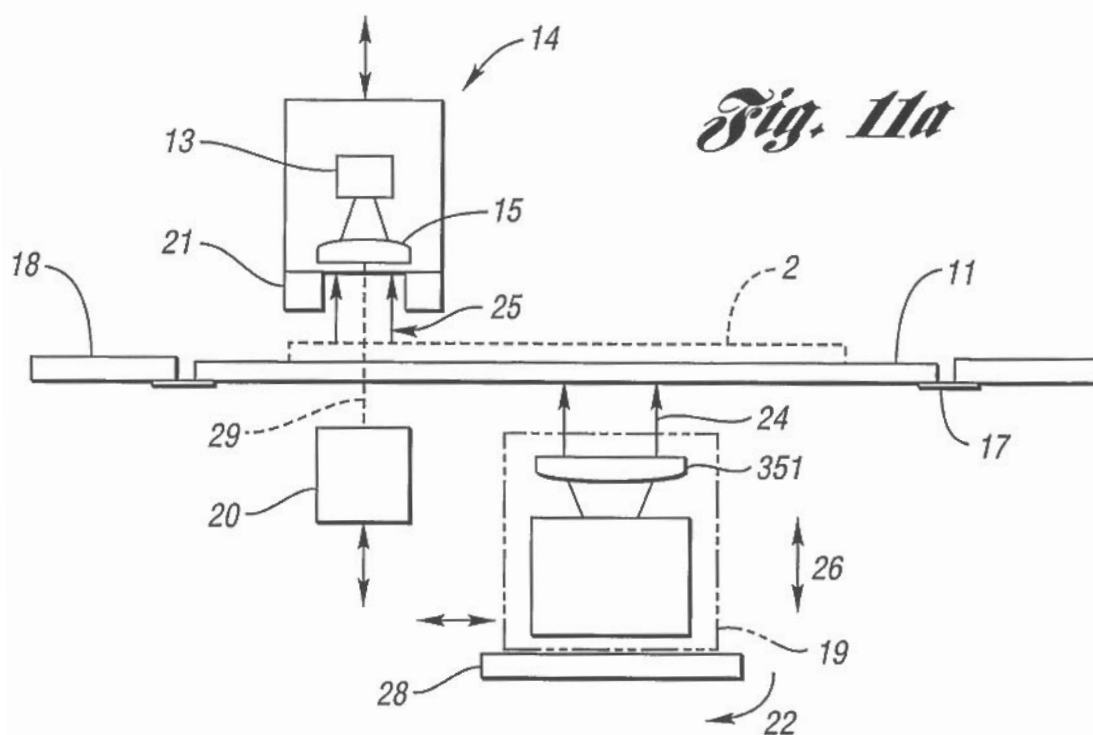
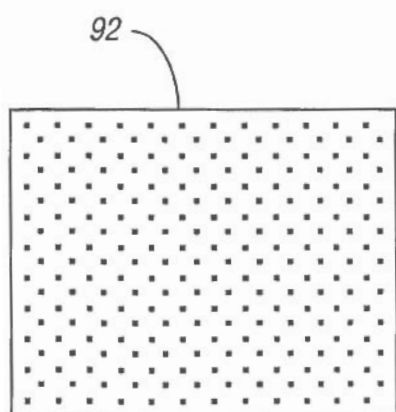
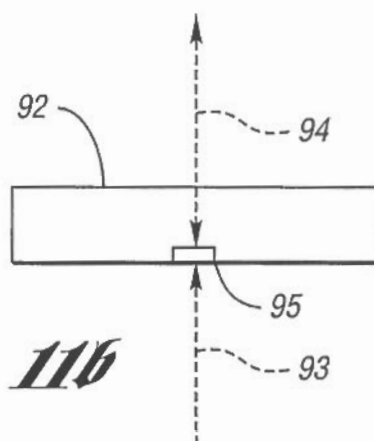
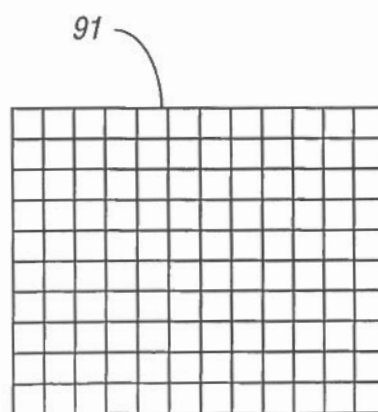


Fig. 9c

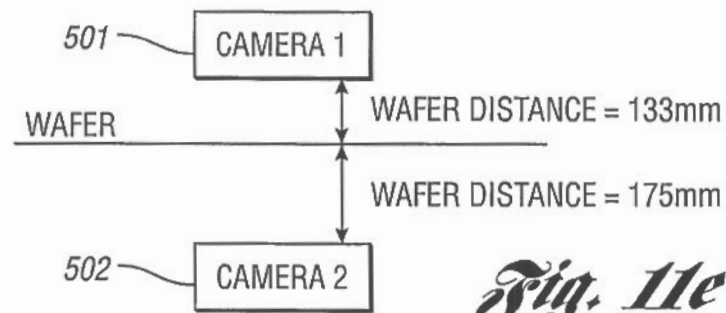
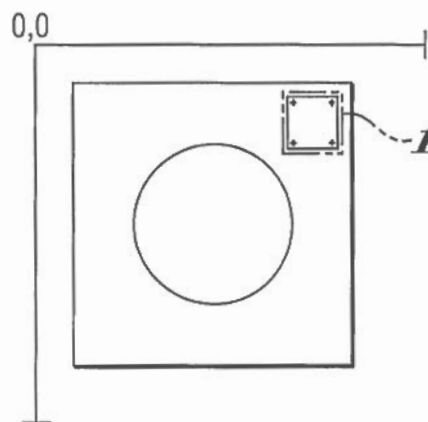
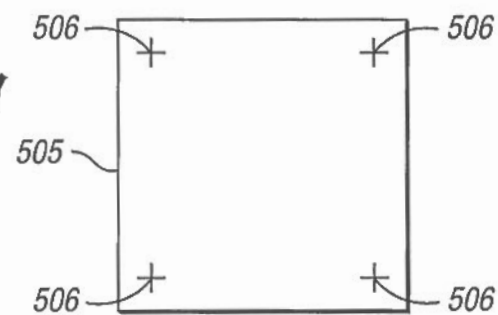
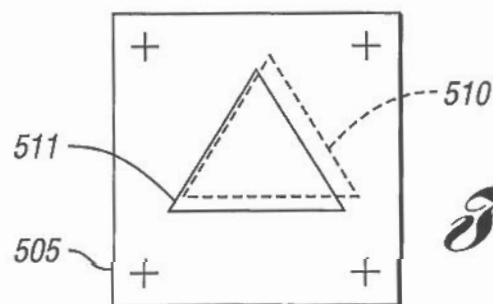
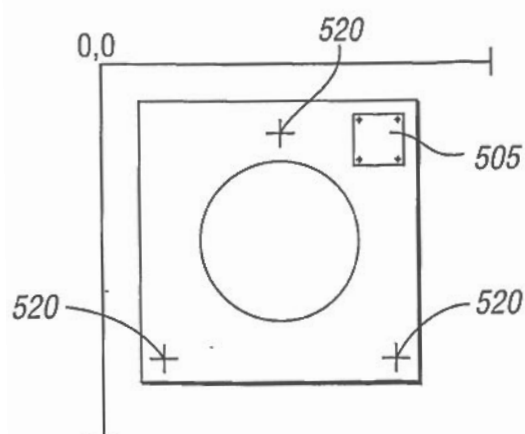
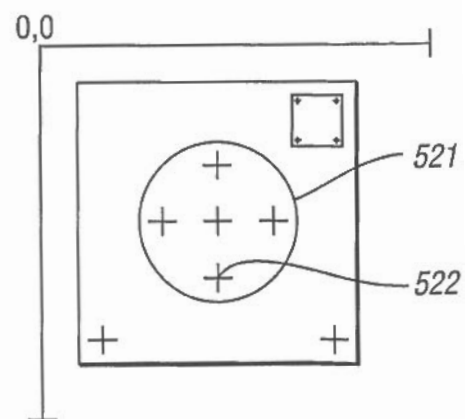
Fig. 10a



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*Fig. 11b**Fig. 11c**Fig. 11d*

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*Fig. 11e**Fig. 11f**Fig. 11g**Fig. 11h**Fig. 11i**Fig. 11j*

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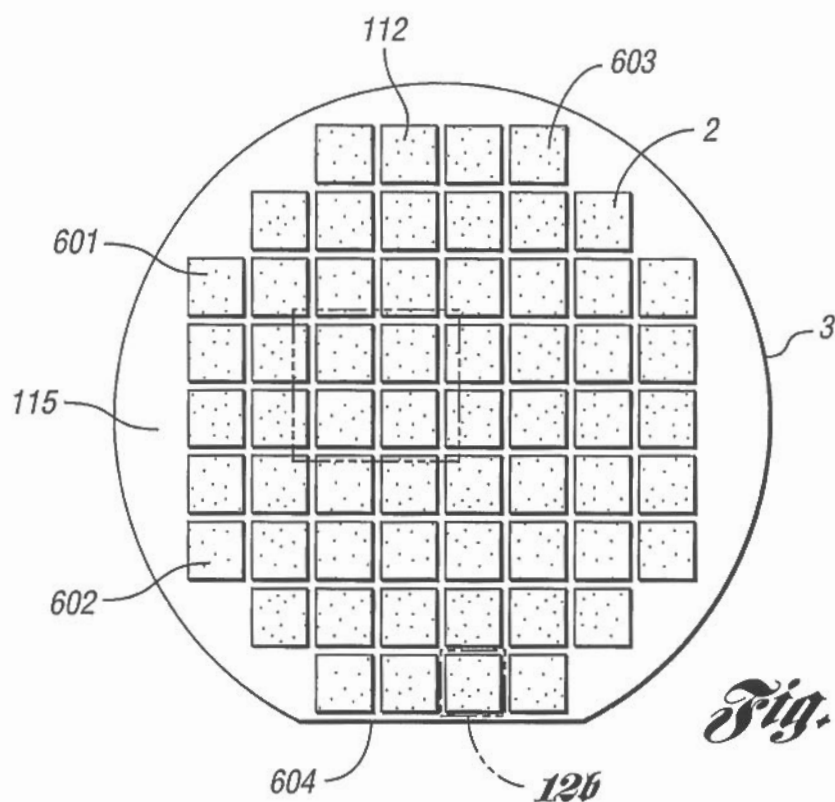
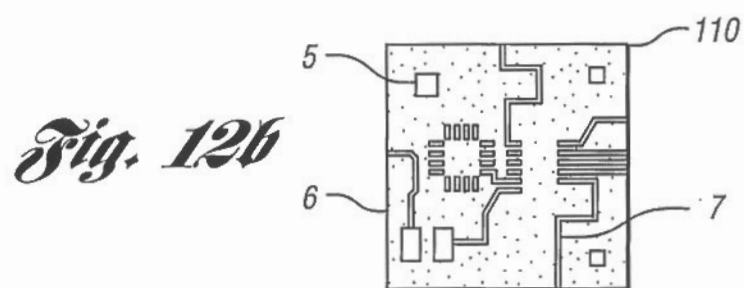
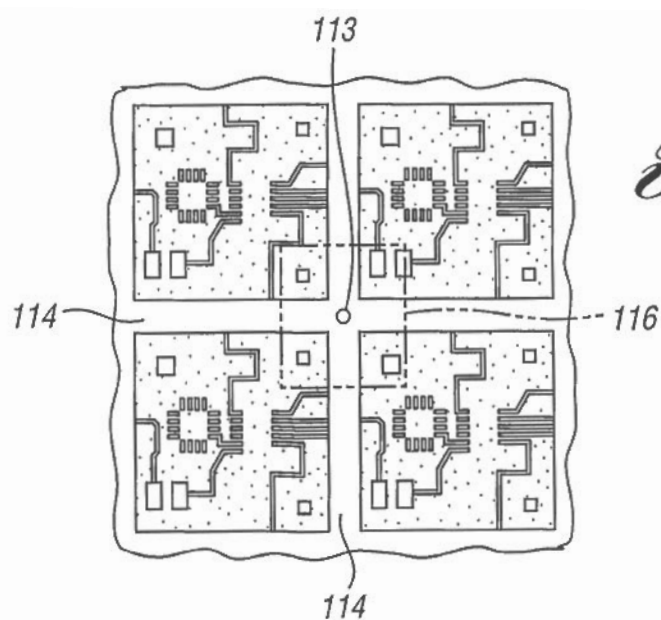
*Fig. 12a**Fig. 12b**Fig. 12c*

Fig. 12b

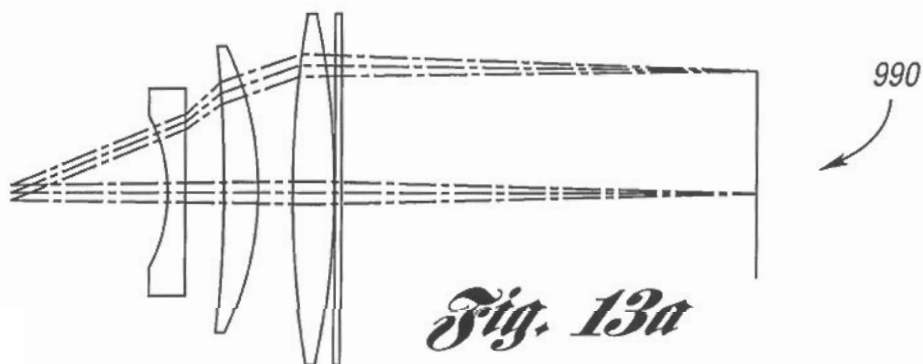
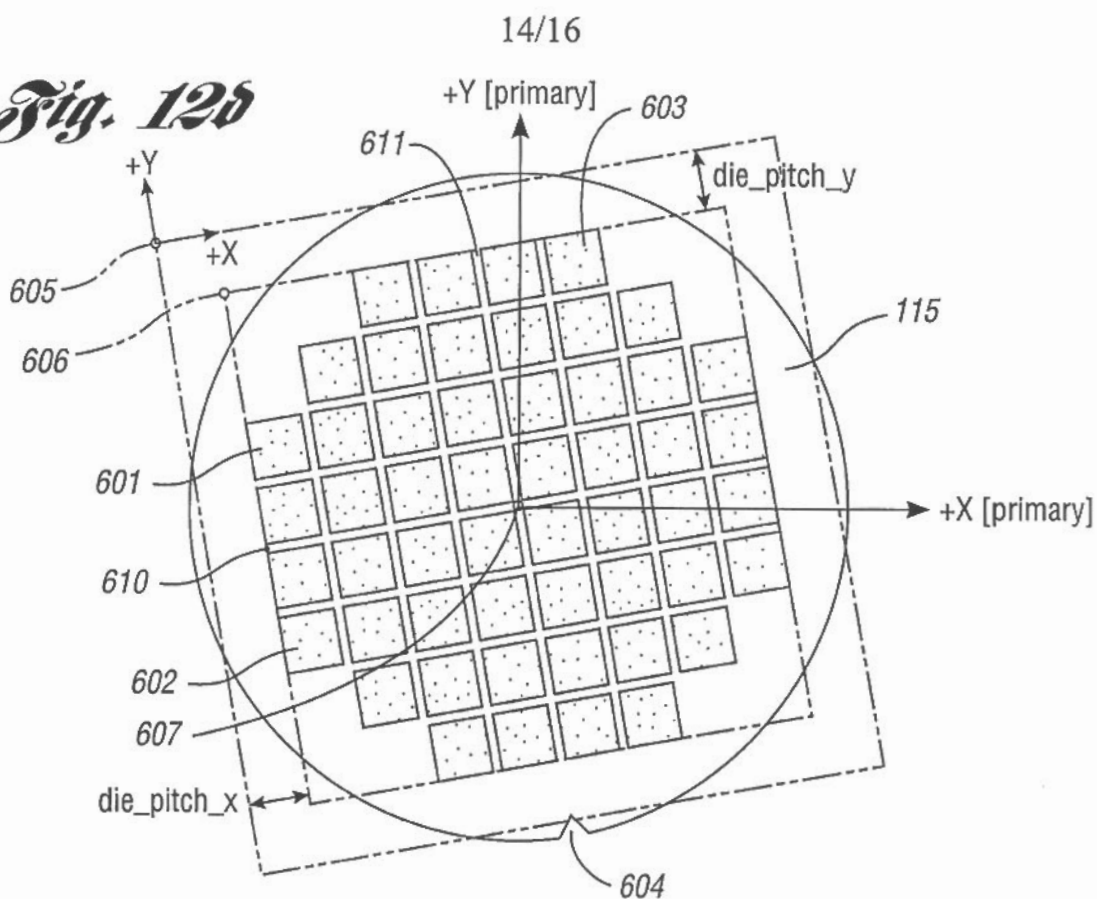


Fig. 13a

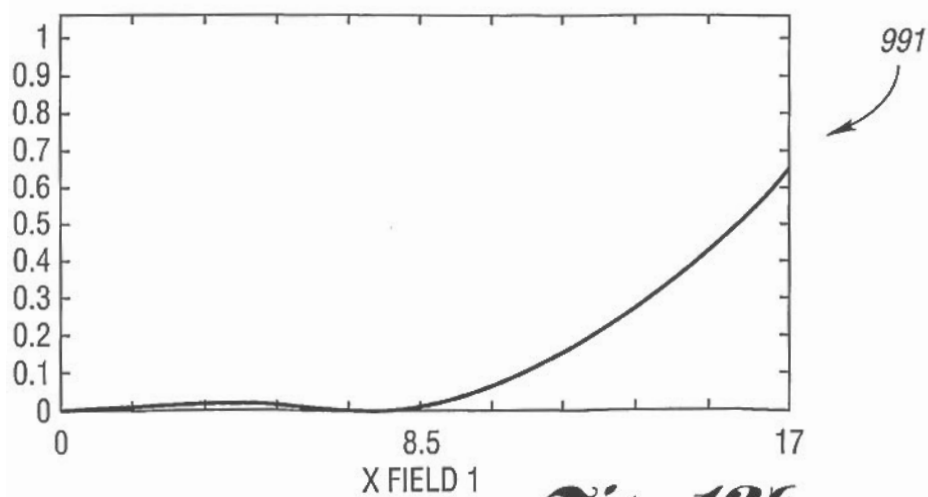


Fig. 13b

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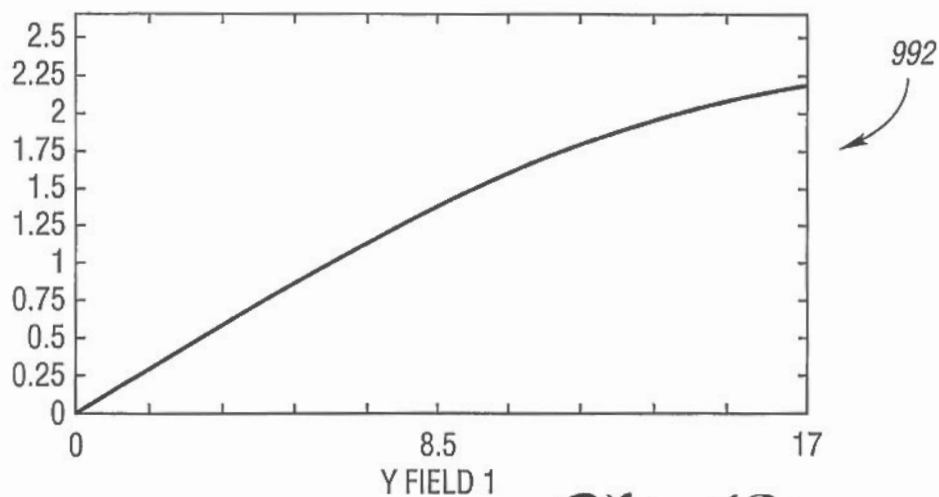


Fig. 13c

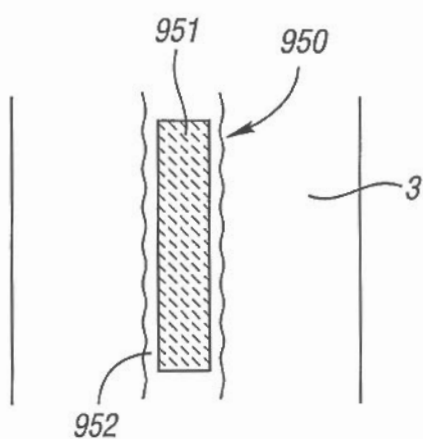


Fig. 14

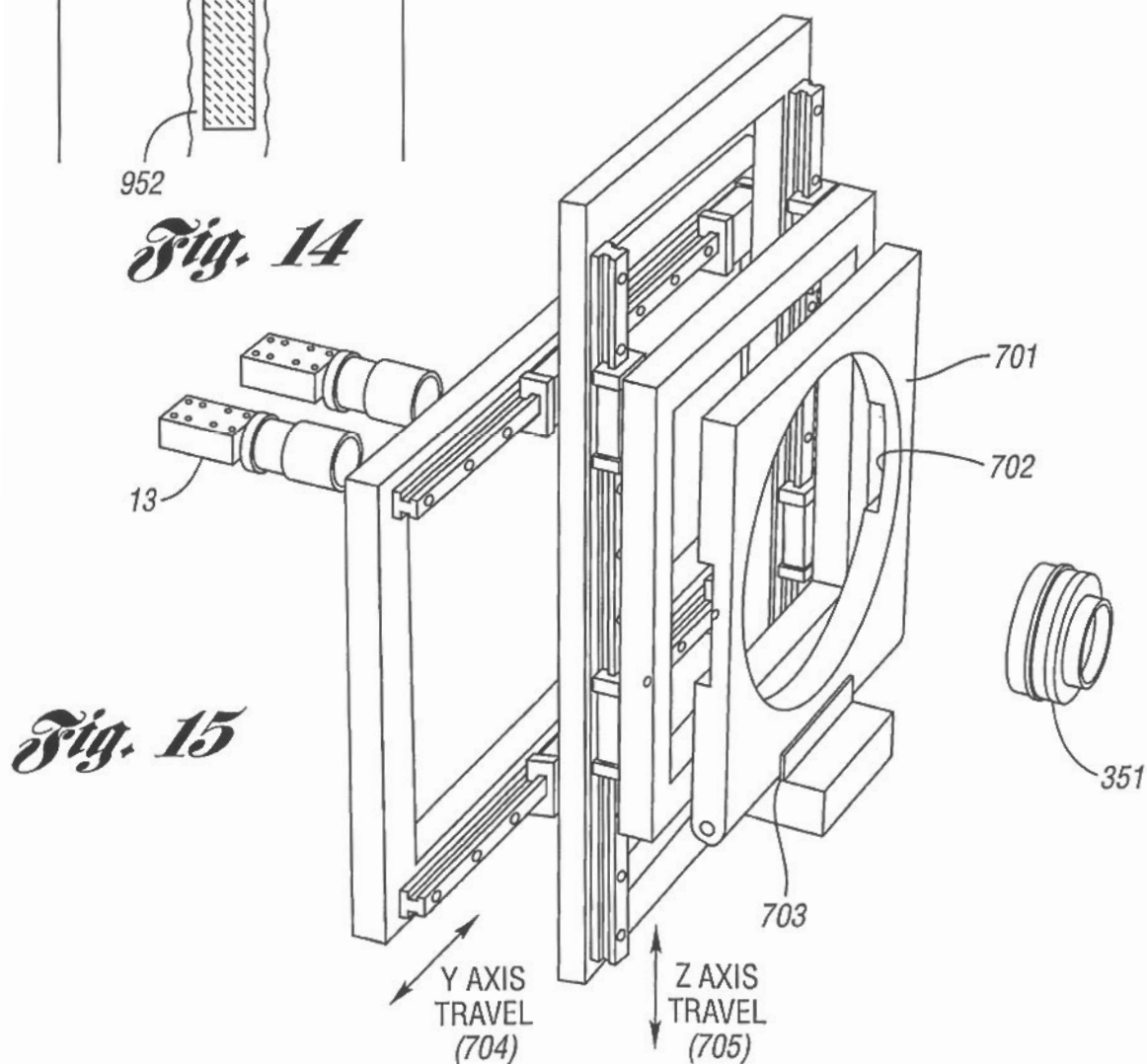
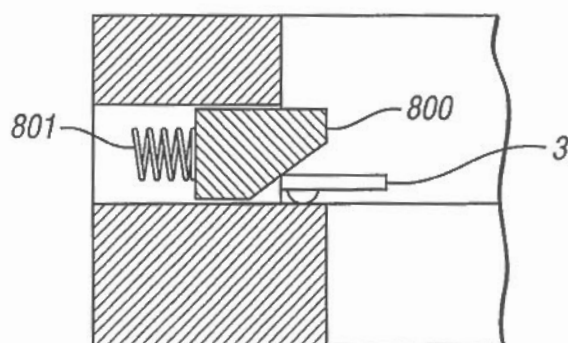
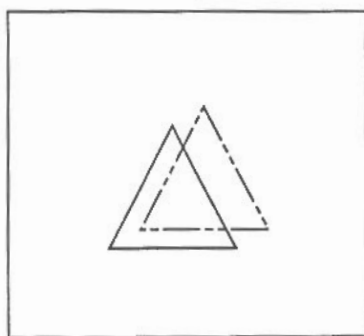
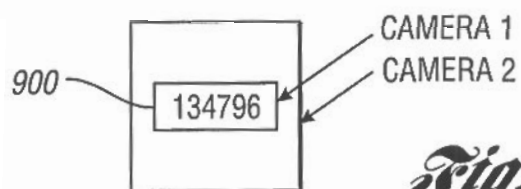
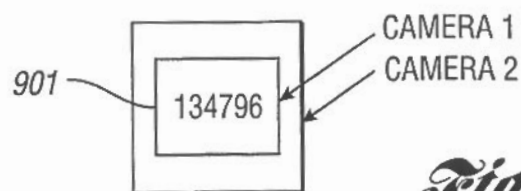


Fig. 15

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*Fig. 16**Fig. 17a**Fig. 17b**Fig. 17c*