

1/46

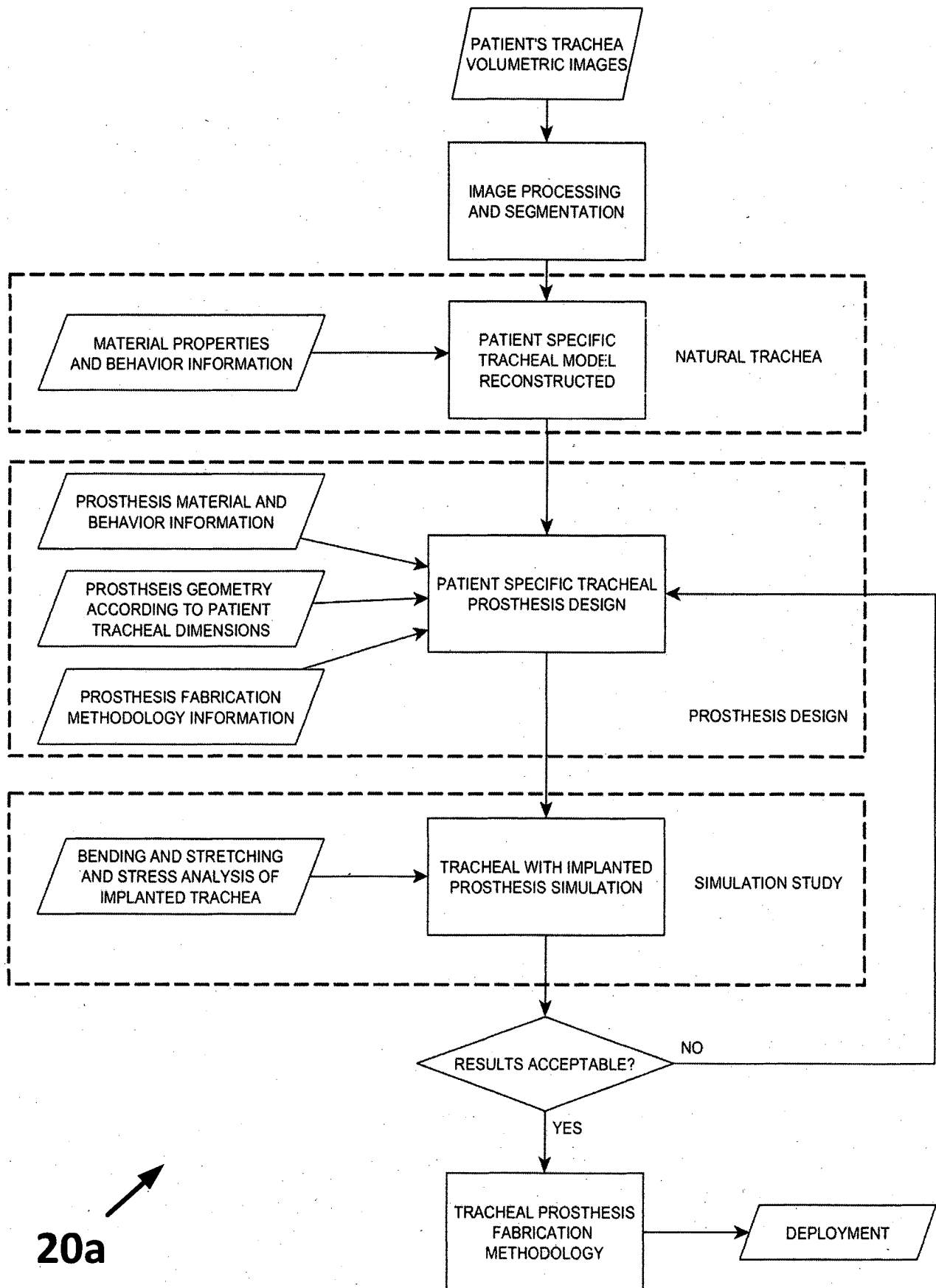
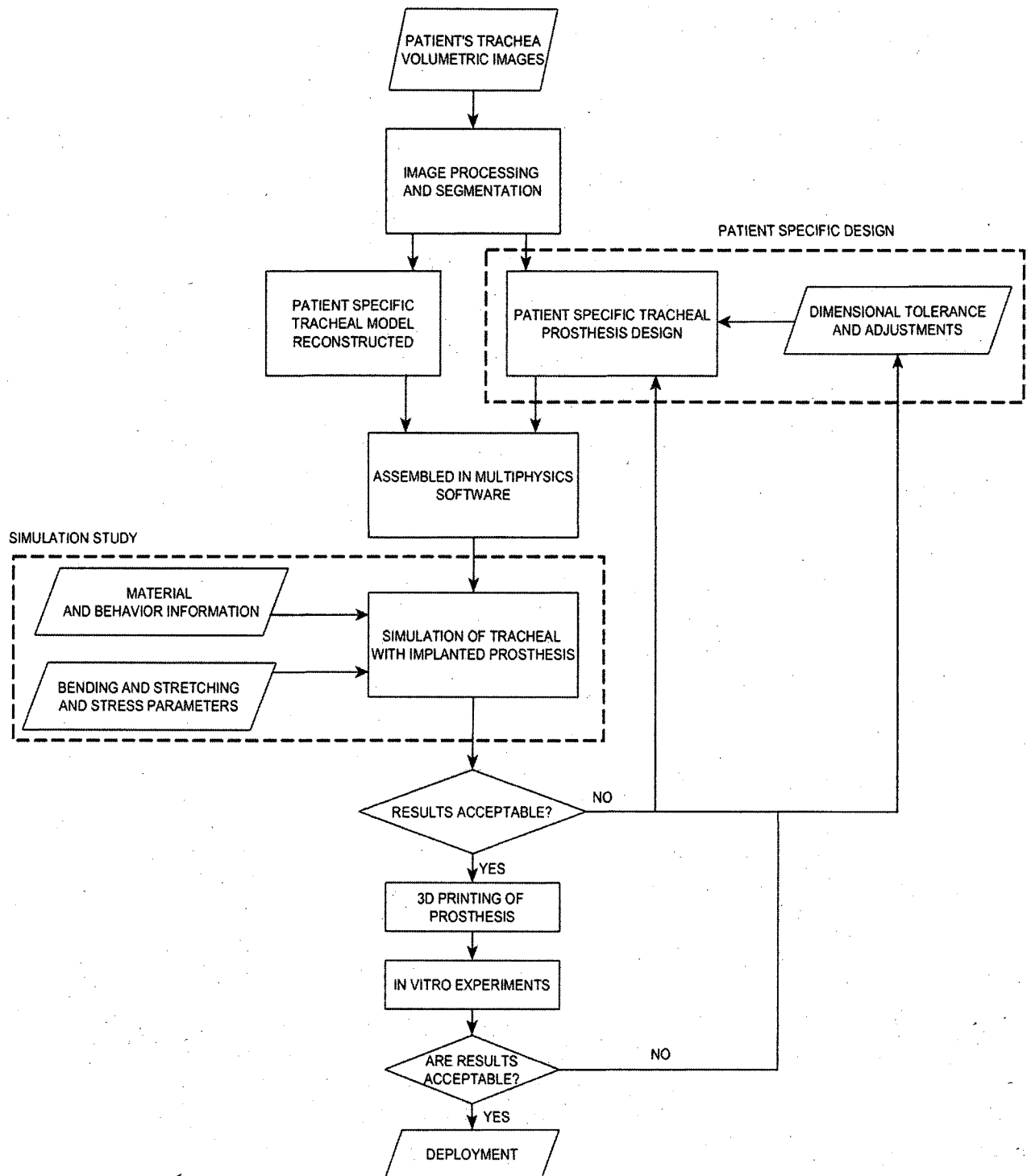


Figure 1A

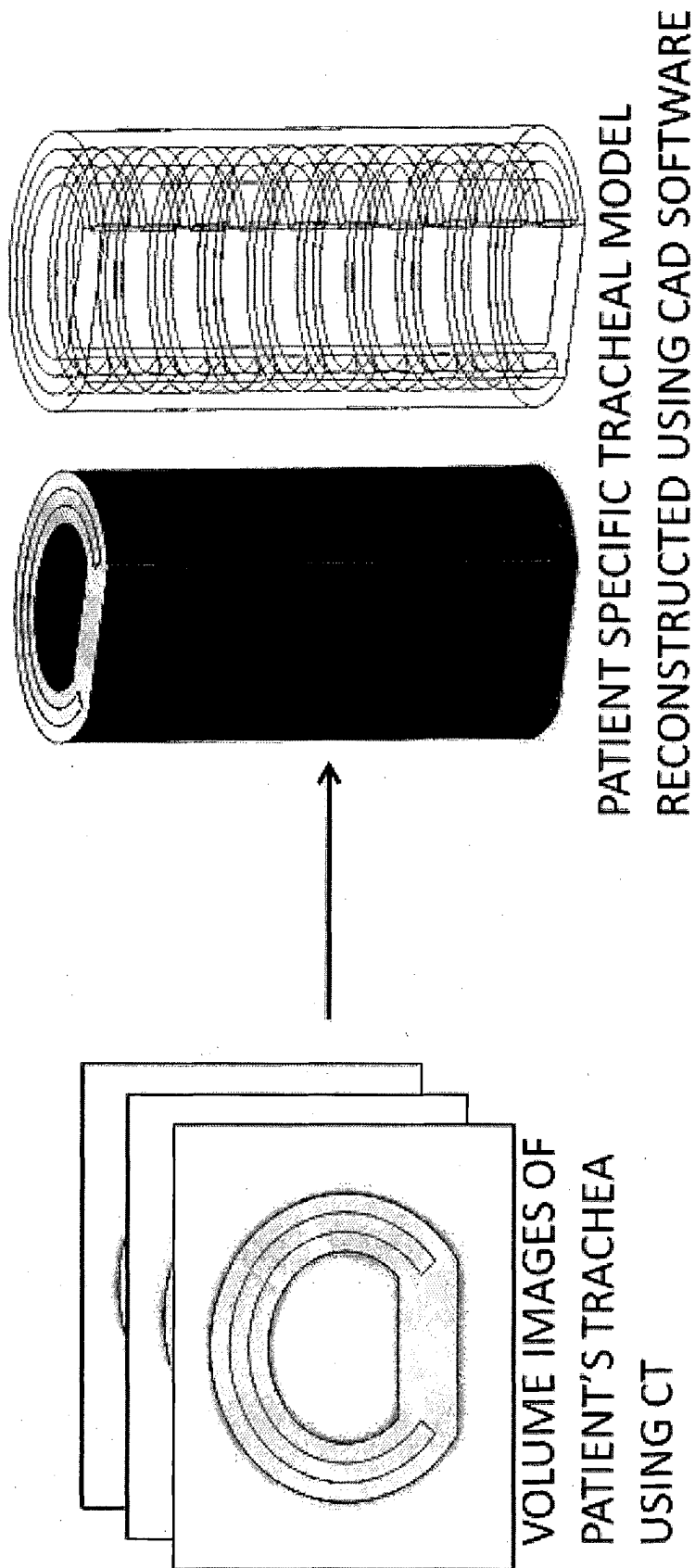
2/46



20b

Figure 1B

3/46

**Figure 2**

4/46

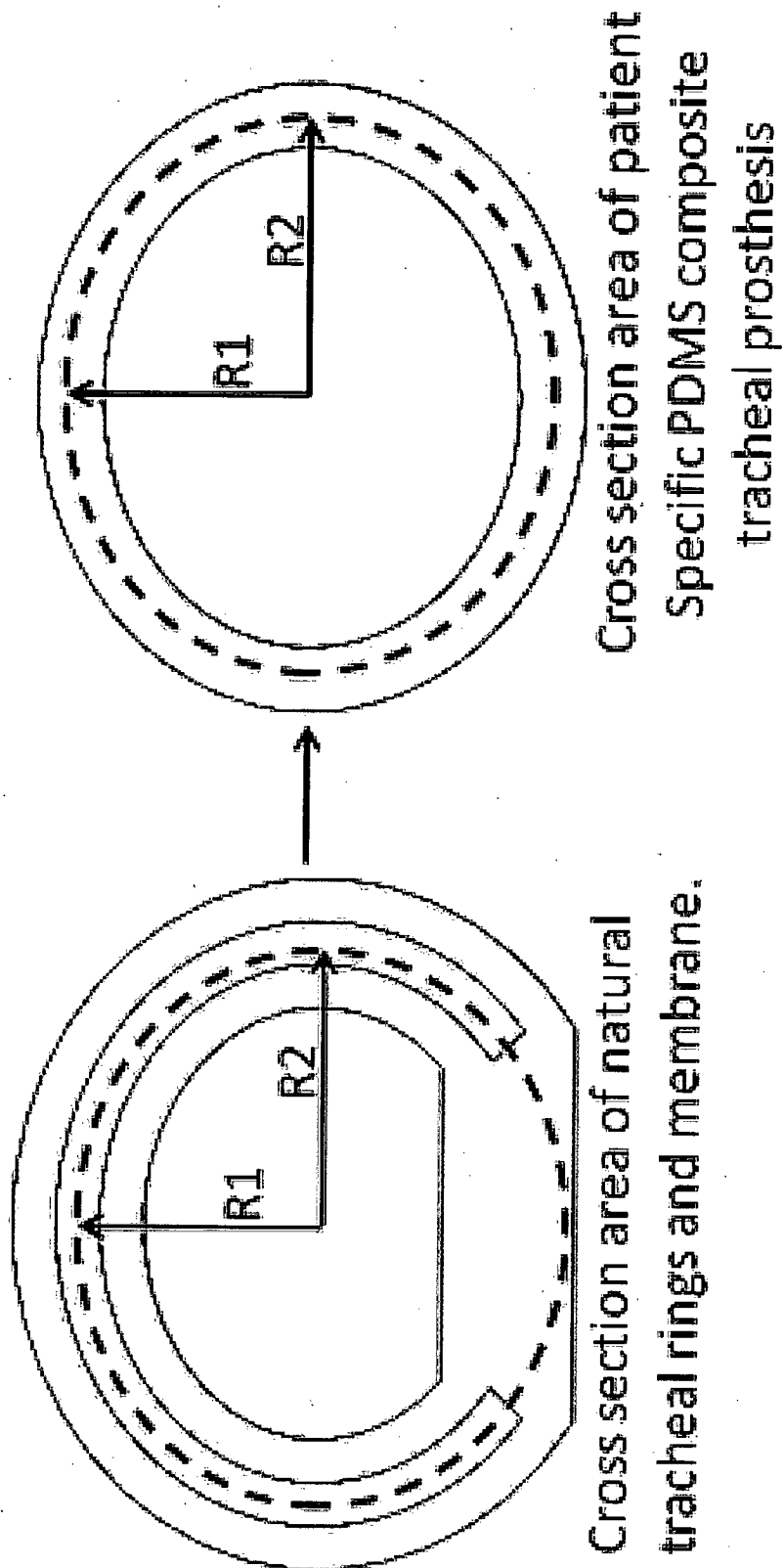
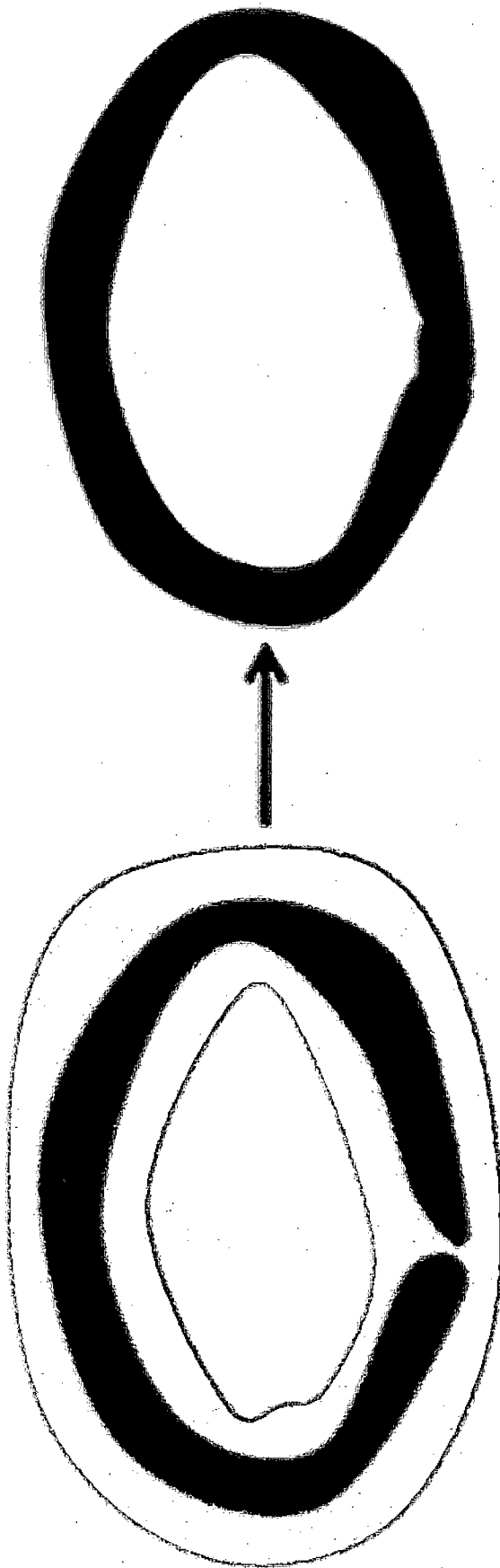


Figure 3A

5/46



Cross section area of natural
tracheal rings and membrane

Cross section area of patient
specific PDMS composite
tracheal prosthesis

Figure 3B

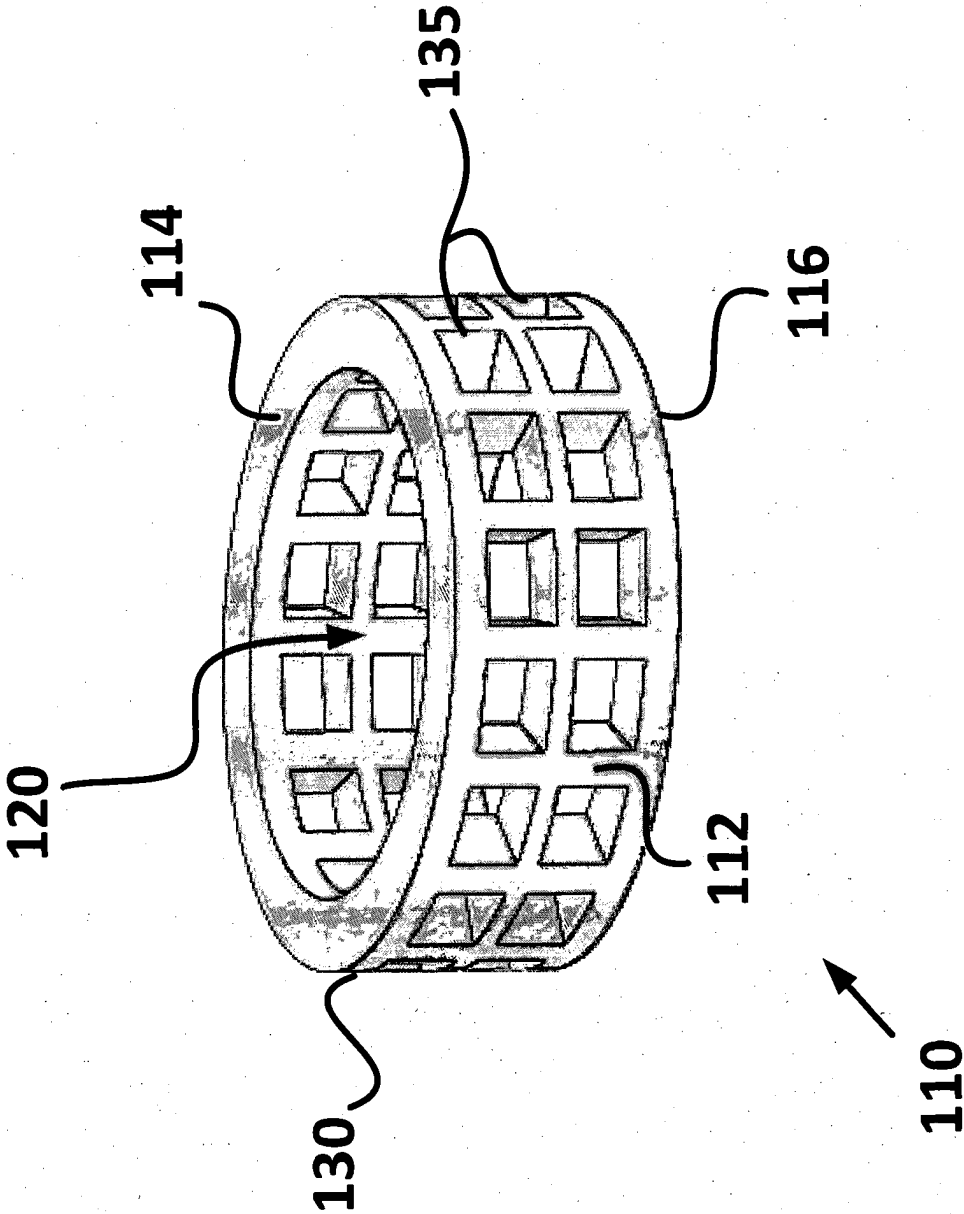


Figure 4A

7/46

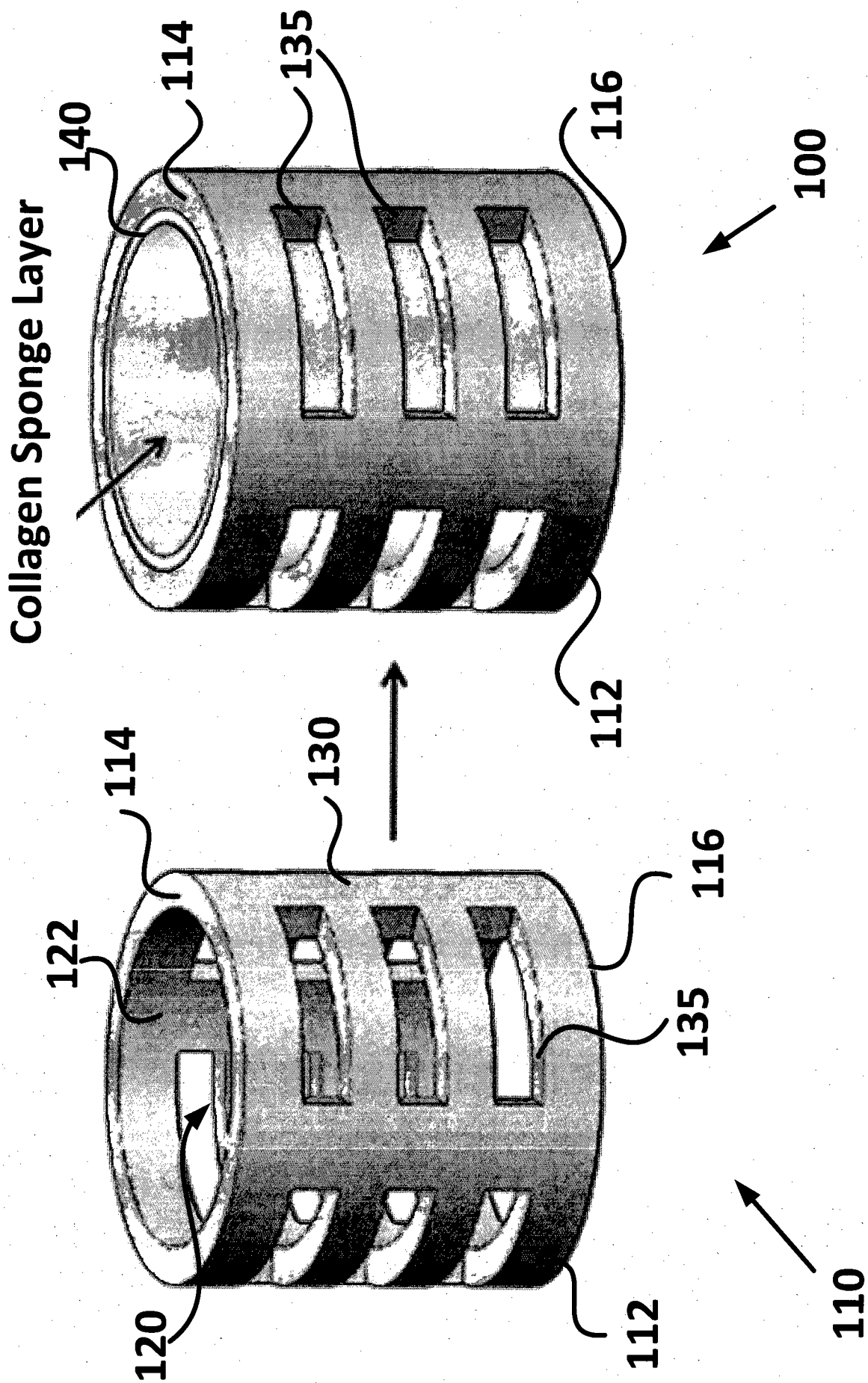


Figure 4B

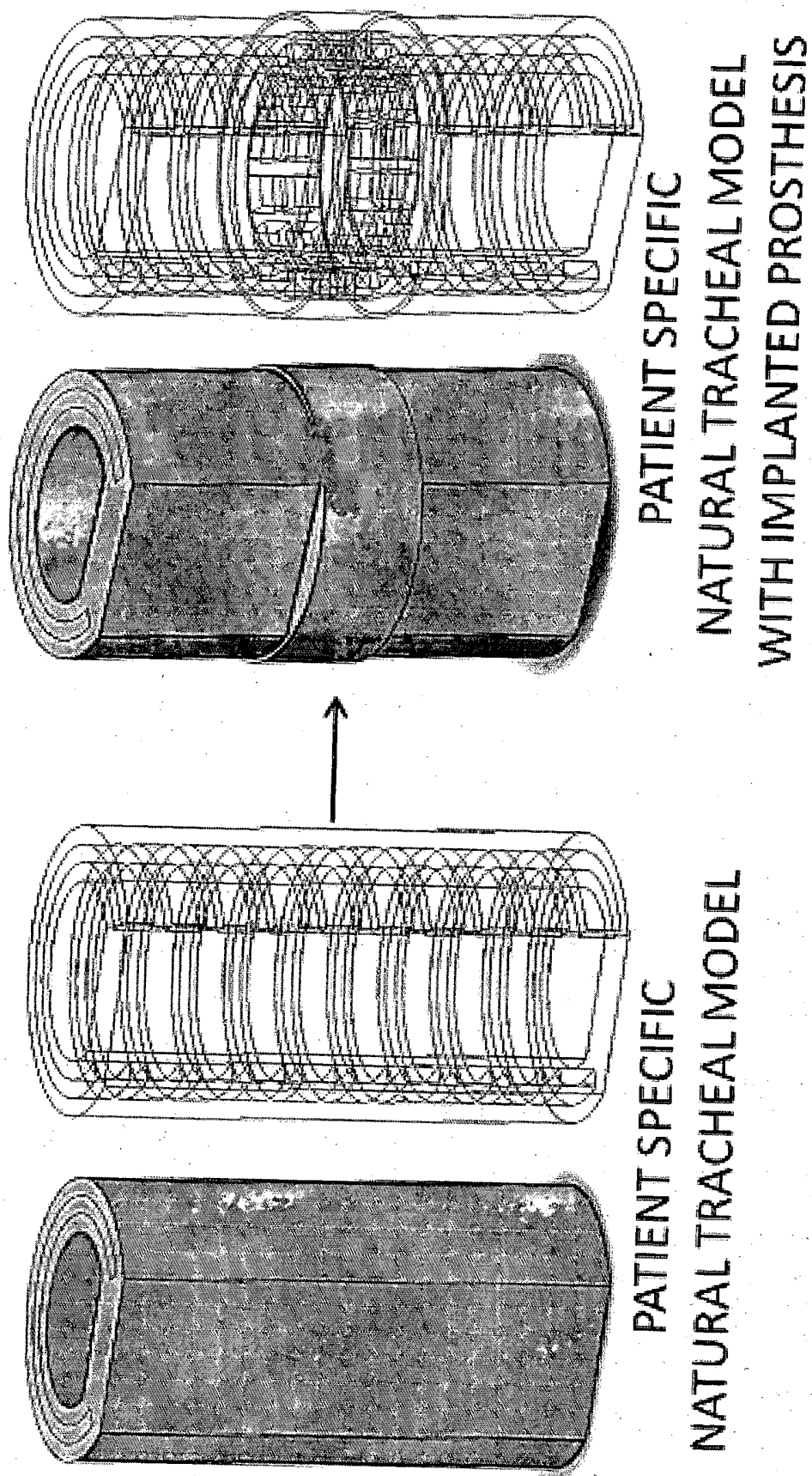
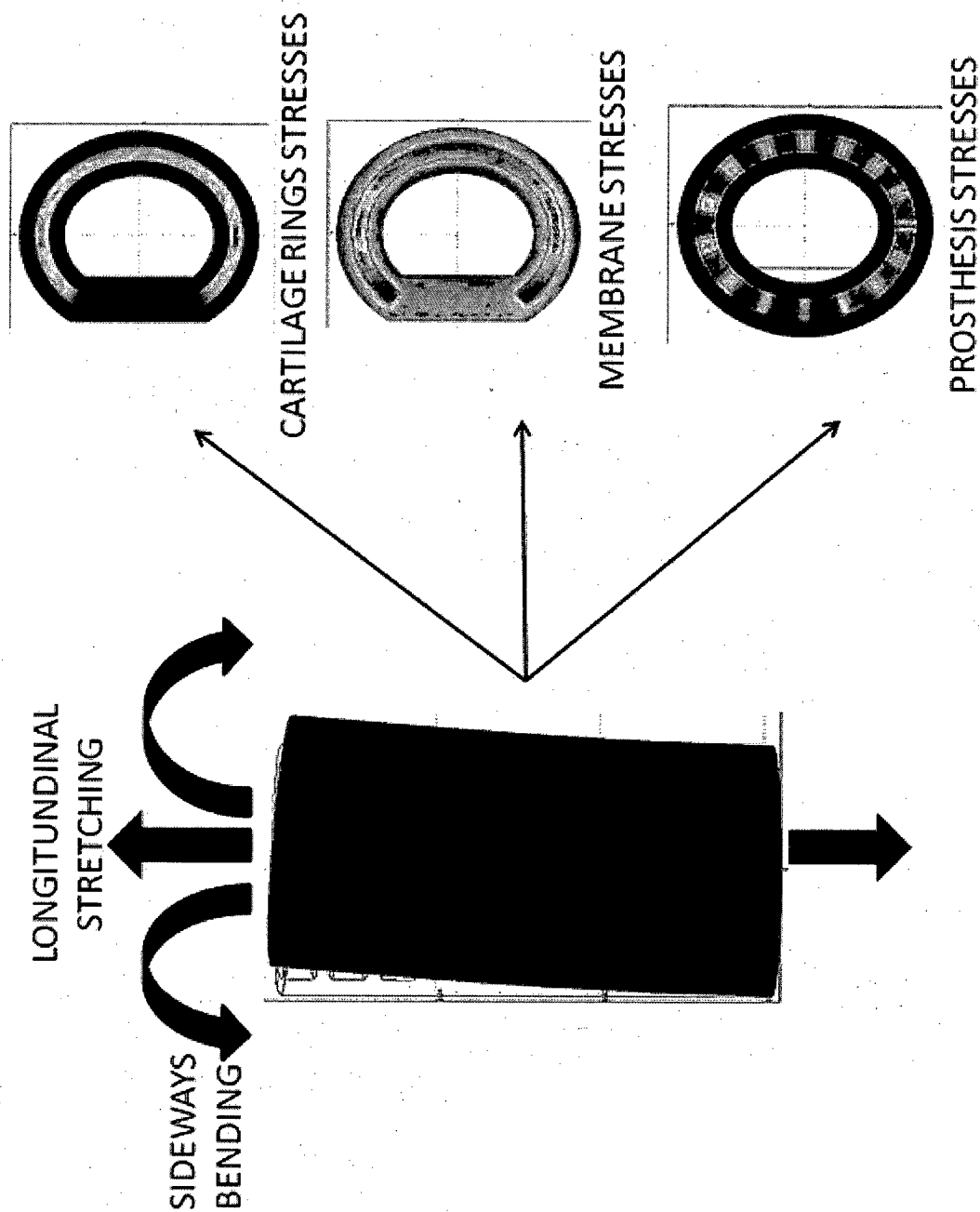


Figure 5

**Figure 6**

10/46

Stress Results for Different Implants in Tracheal Motion Simulation

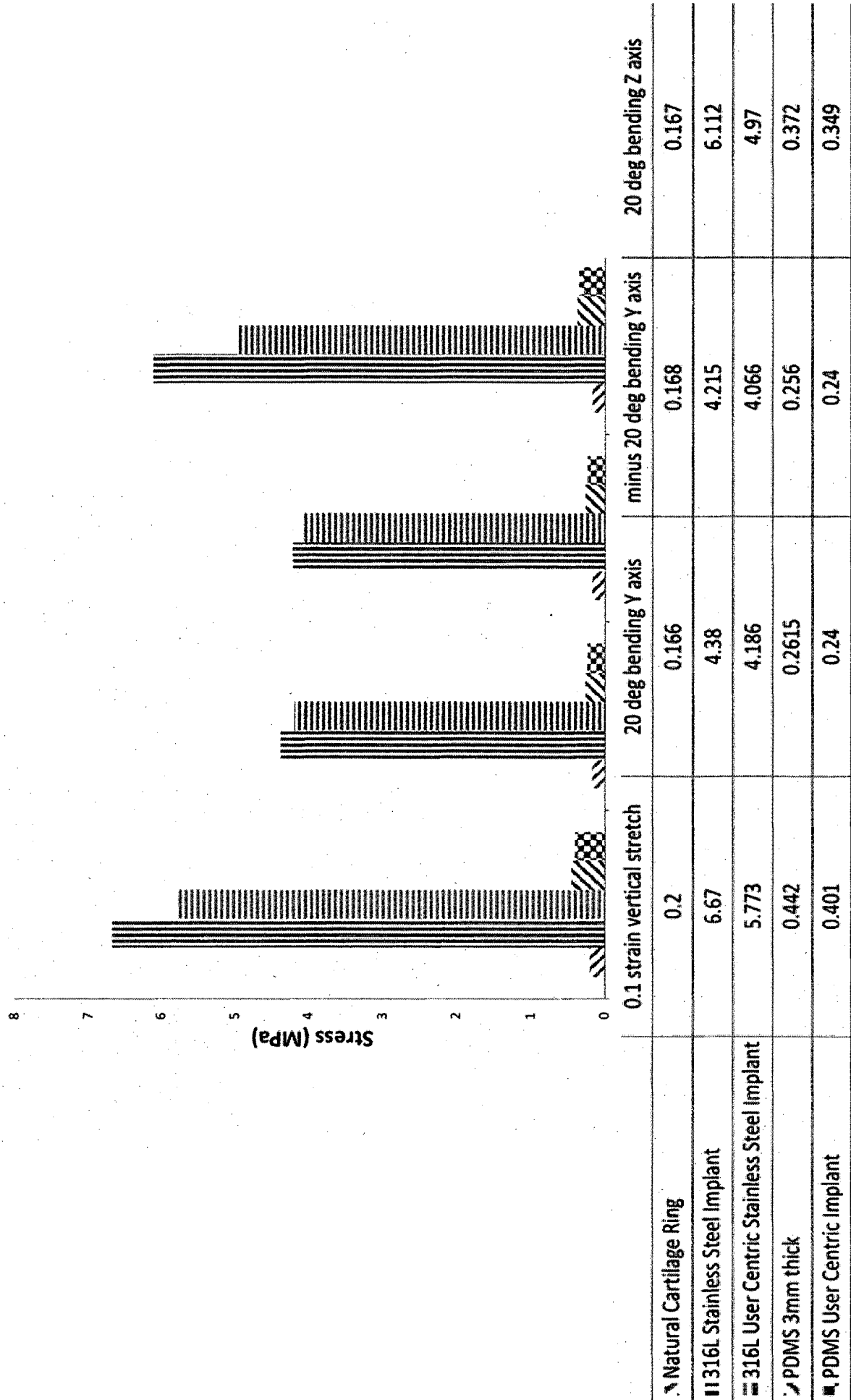


Figure 7A

11/46

Stress Results for Different Implants in Tracheal Motion Simulation

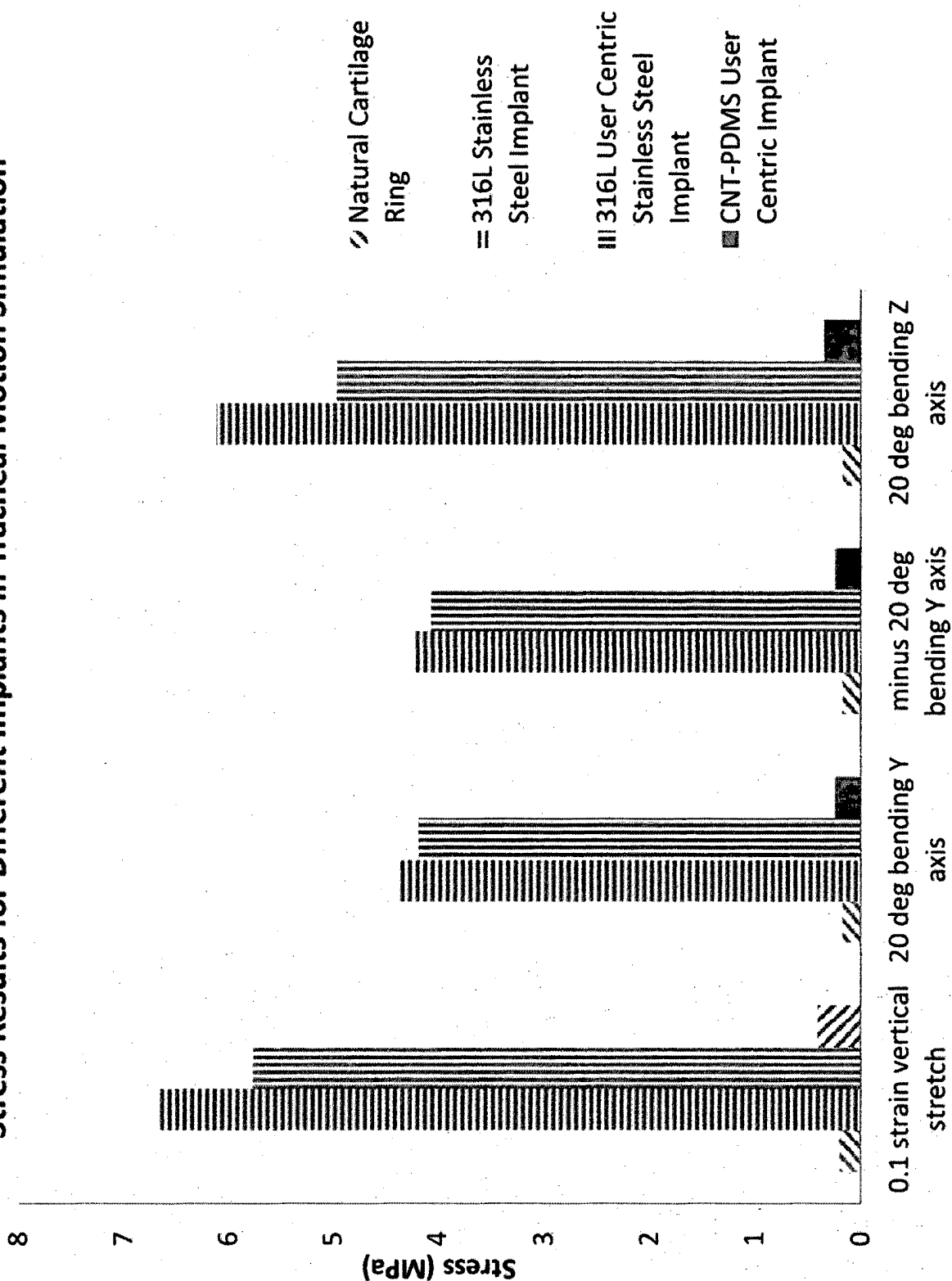


Figure 7B

12/46

Membrane Stress Results for Different Implants in Tracheal Motion

Simulation

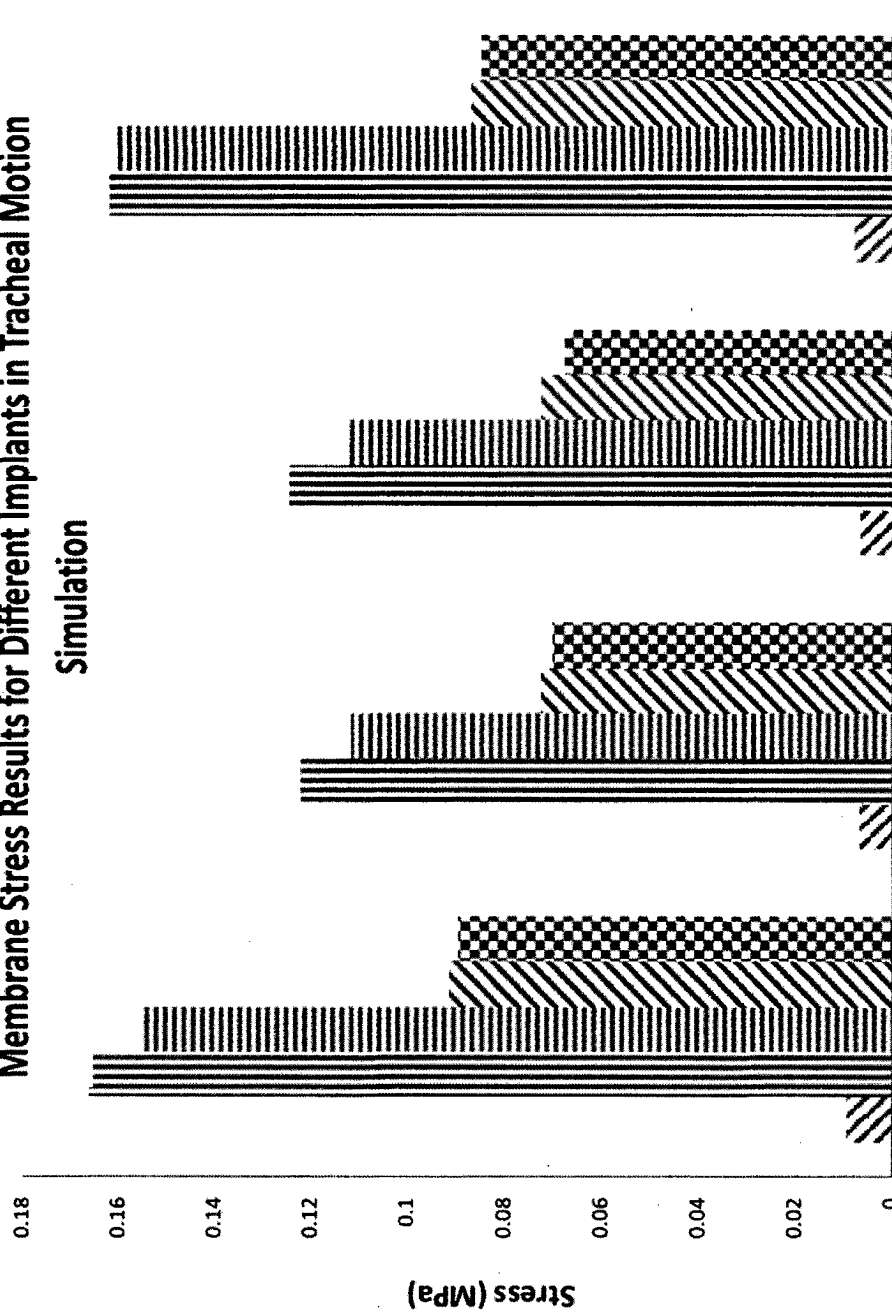


Figure 8A

13/46

Membrane Stress Results for Different Implants in Tracheal Motion Simulation

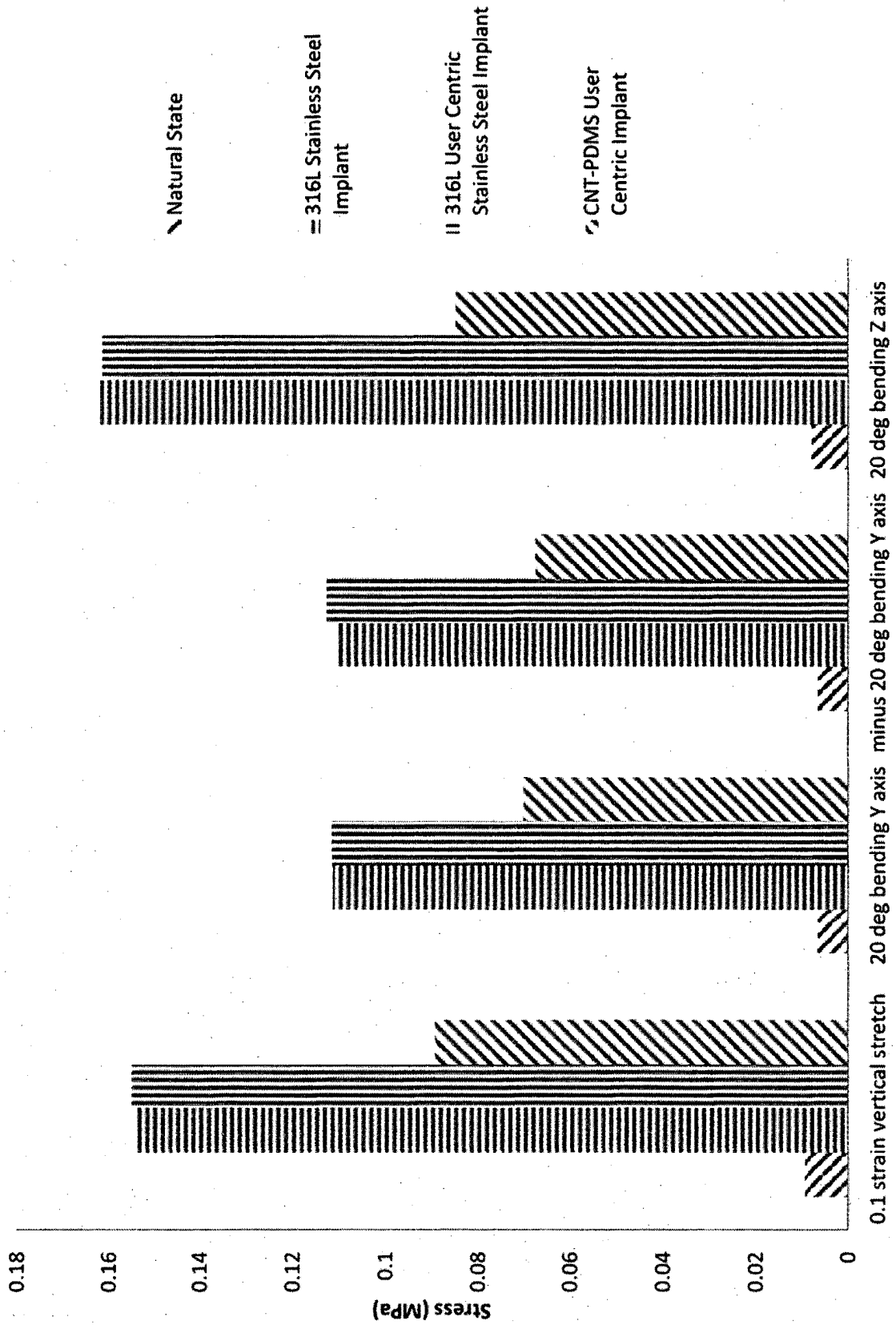


Figure 8B

14/46

Cartilage Rings Stress Results for Different Implants in Tracheal Motion Simulation

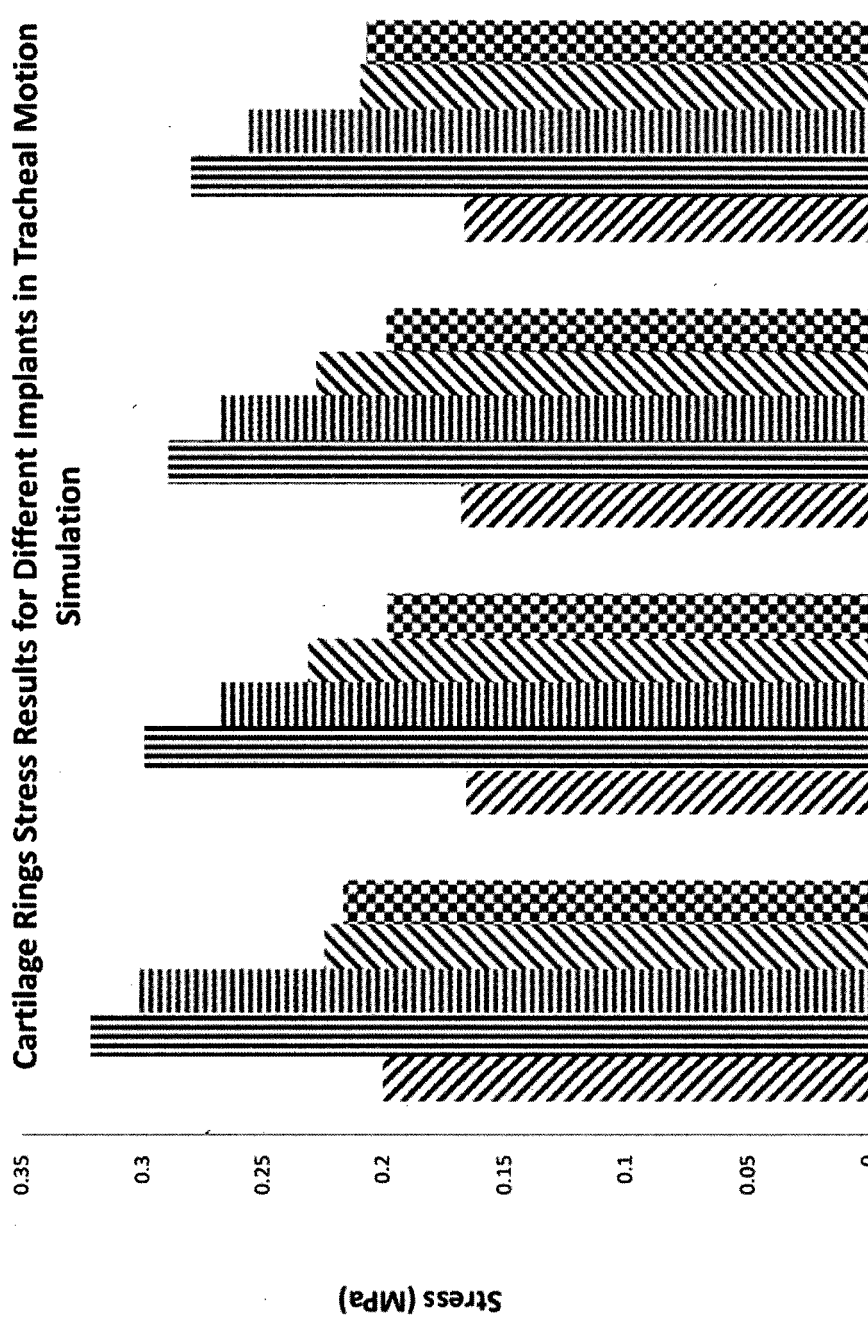


Figure 9A

Cartilage Rings Stress Results for Different Implants in Tracheal Motion Simulation

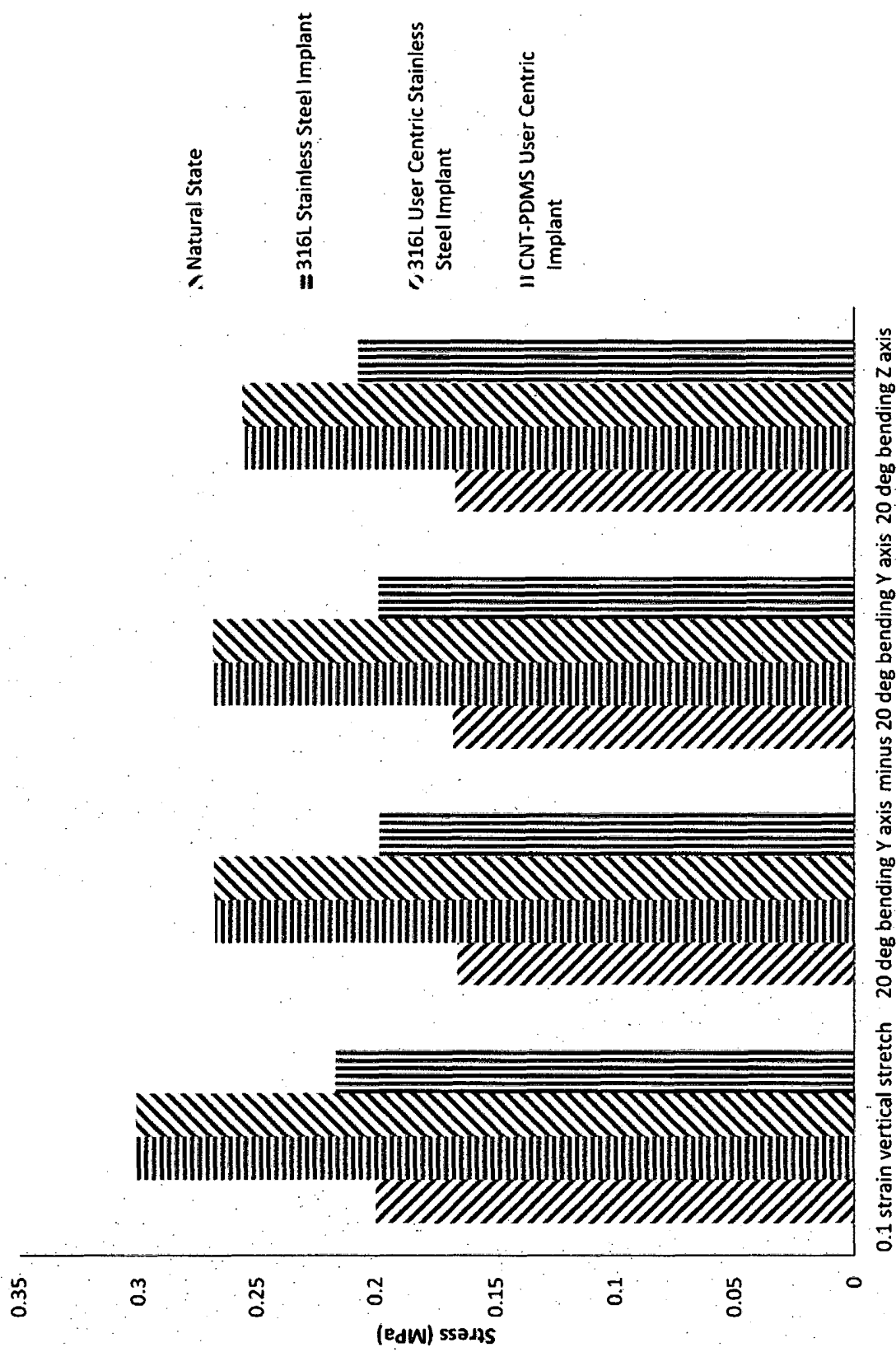
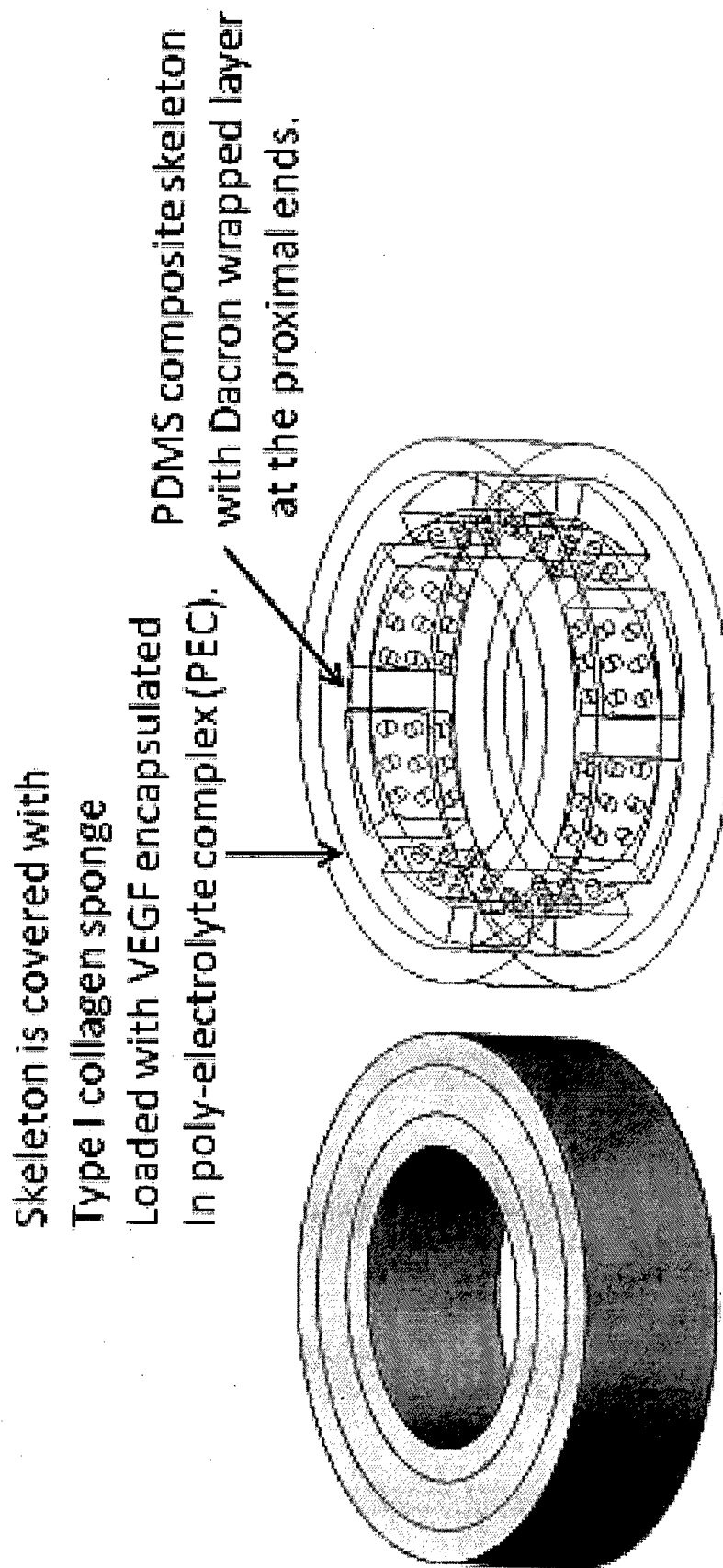


Figure 9B

**Figure 10**

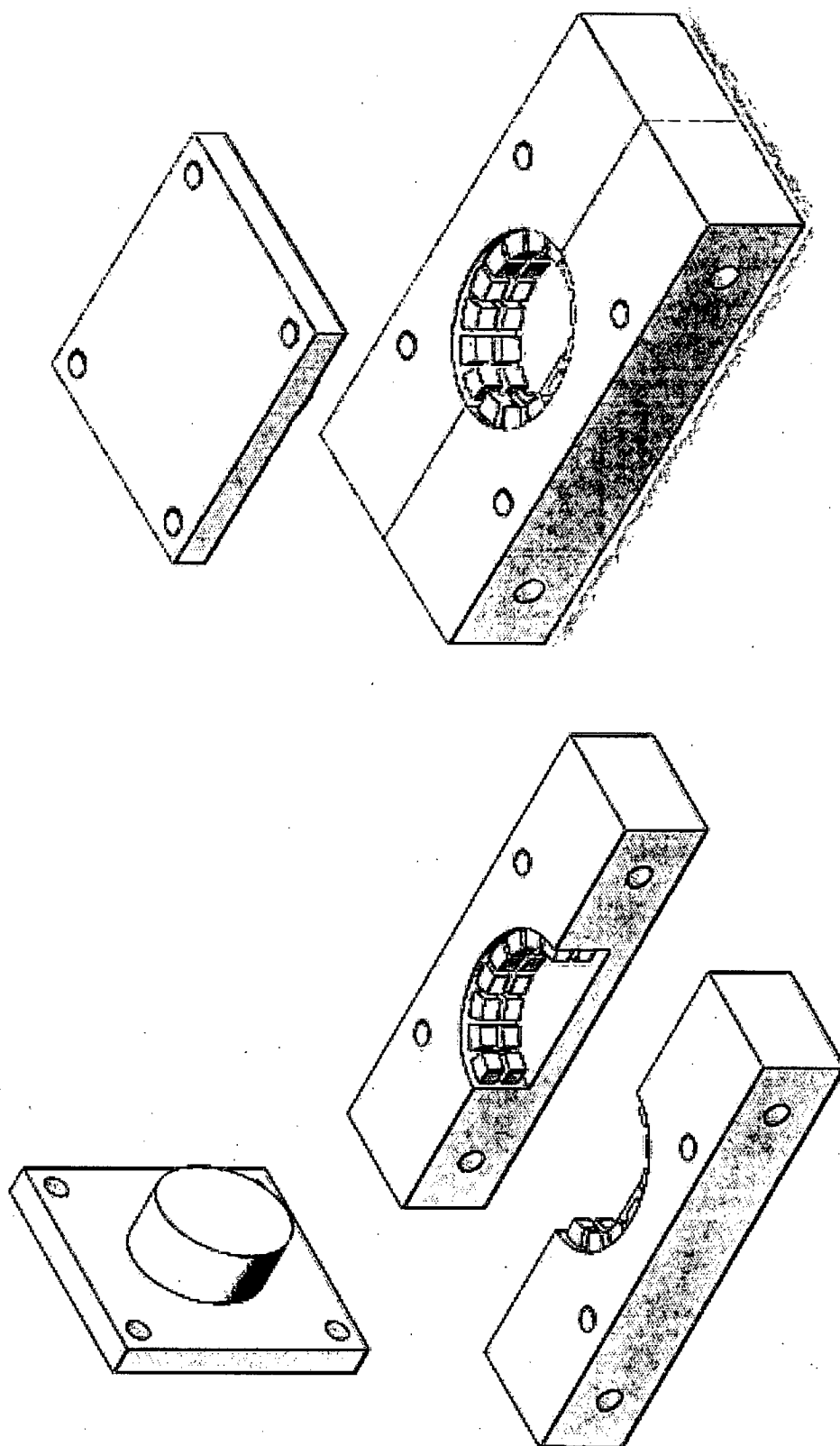


Figure 11

18/46

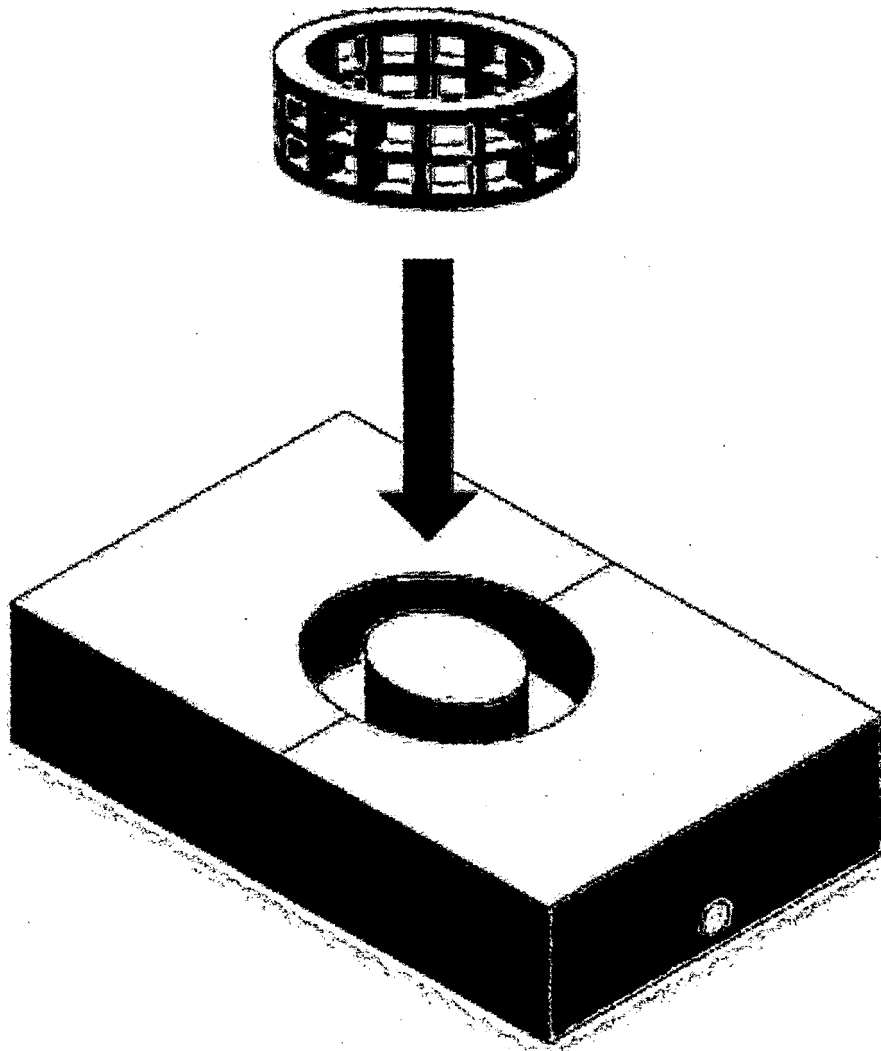


Figure 12

19/46

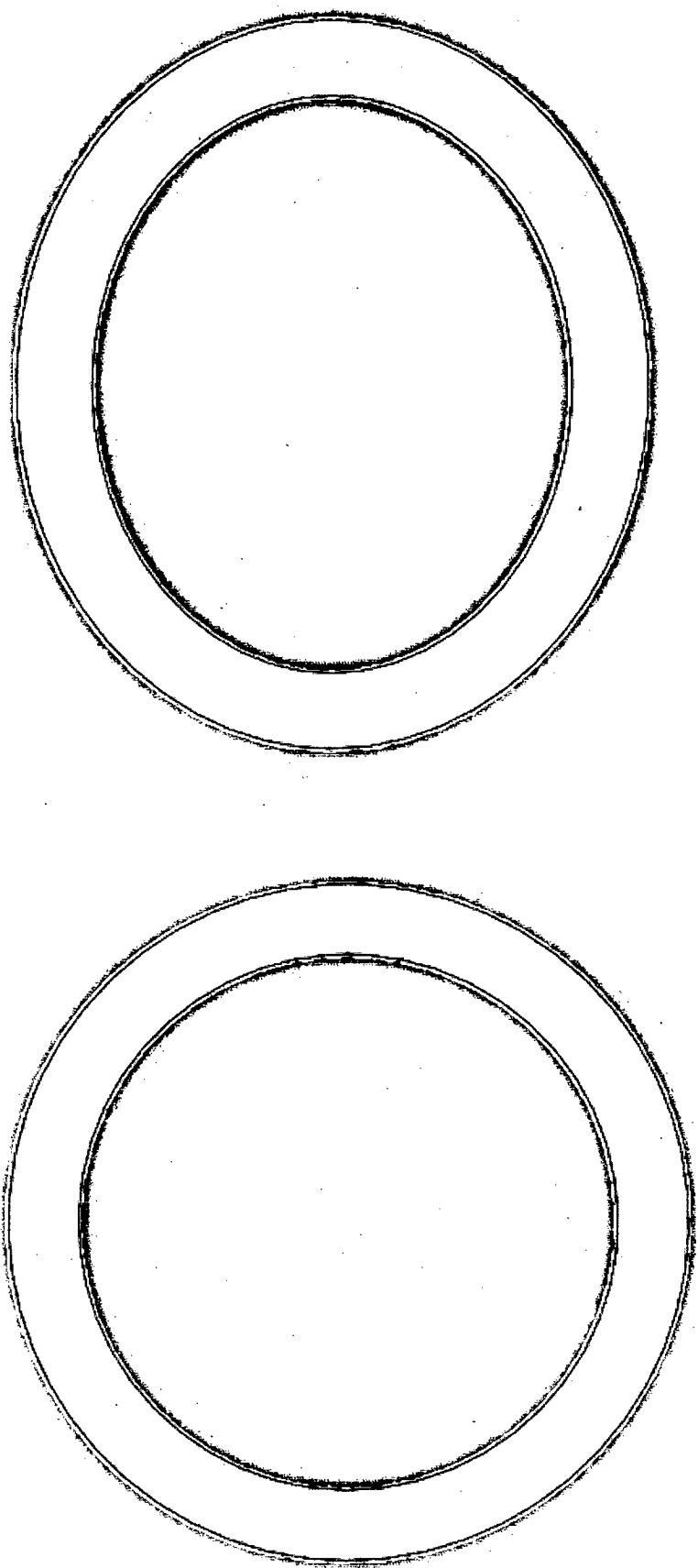
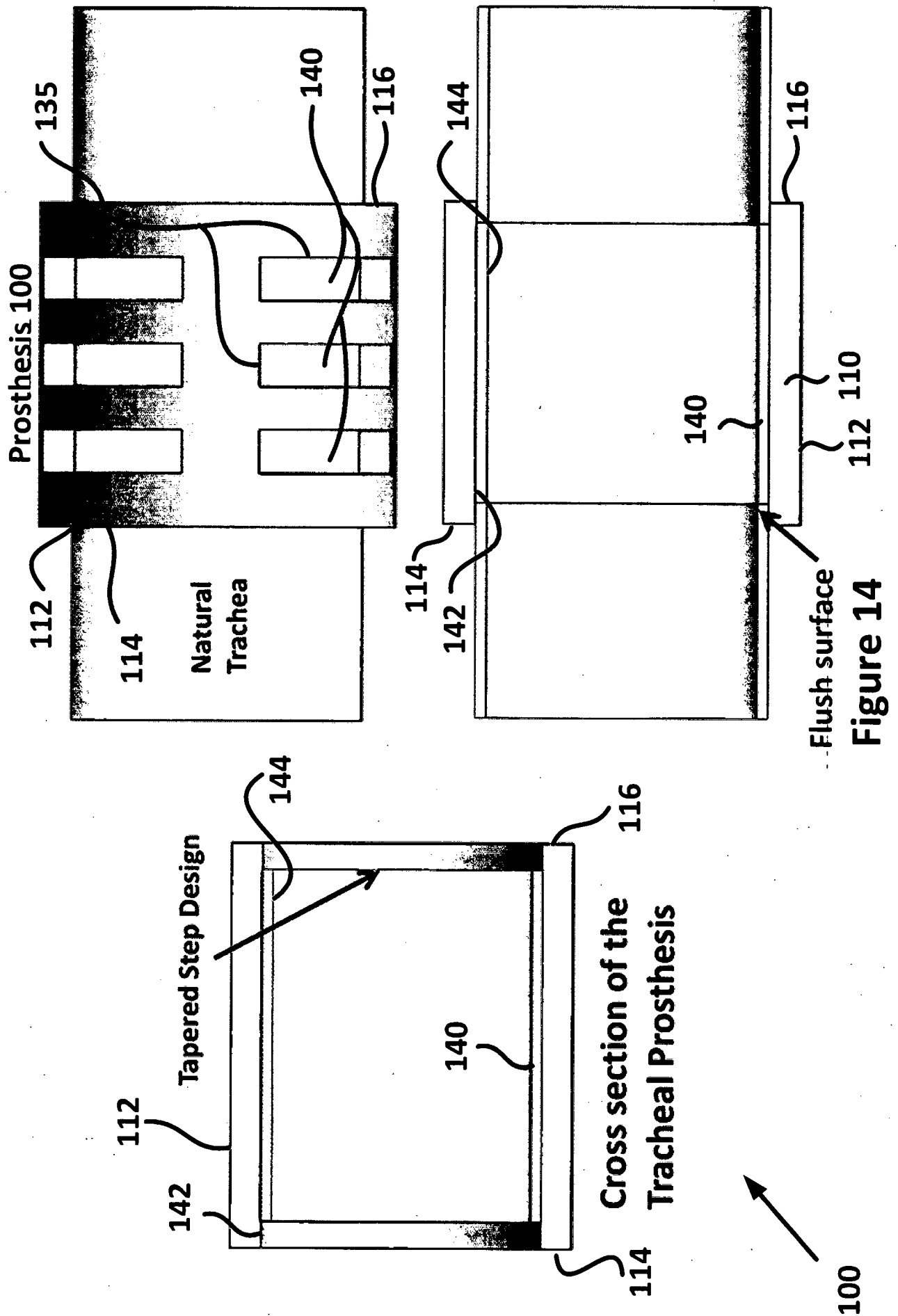


Figure 13



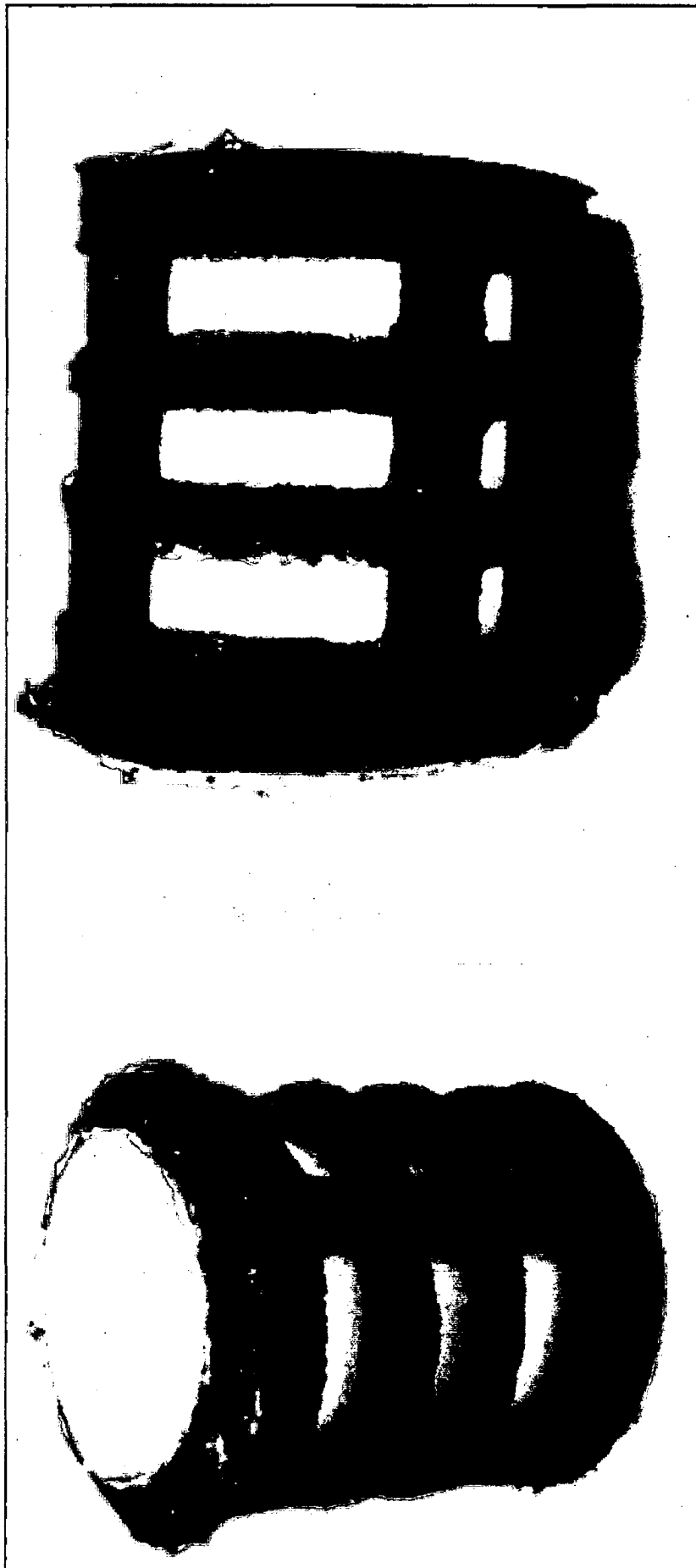


Figure 15

22/46

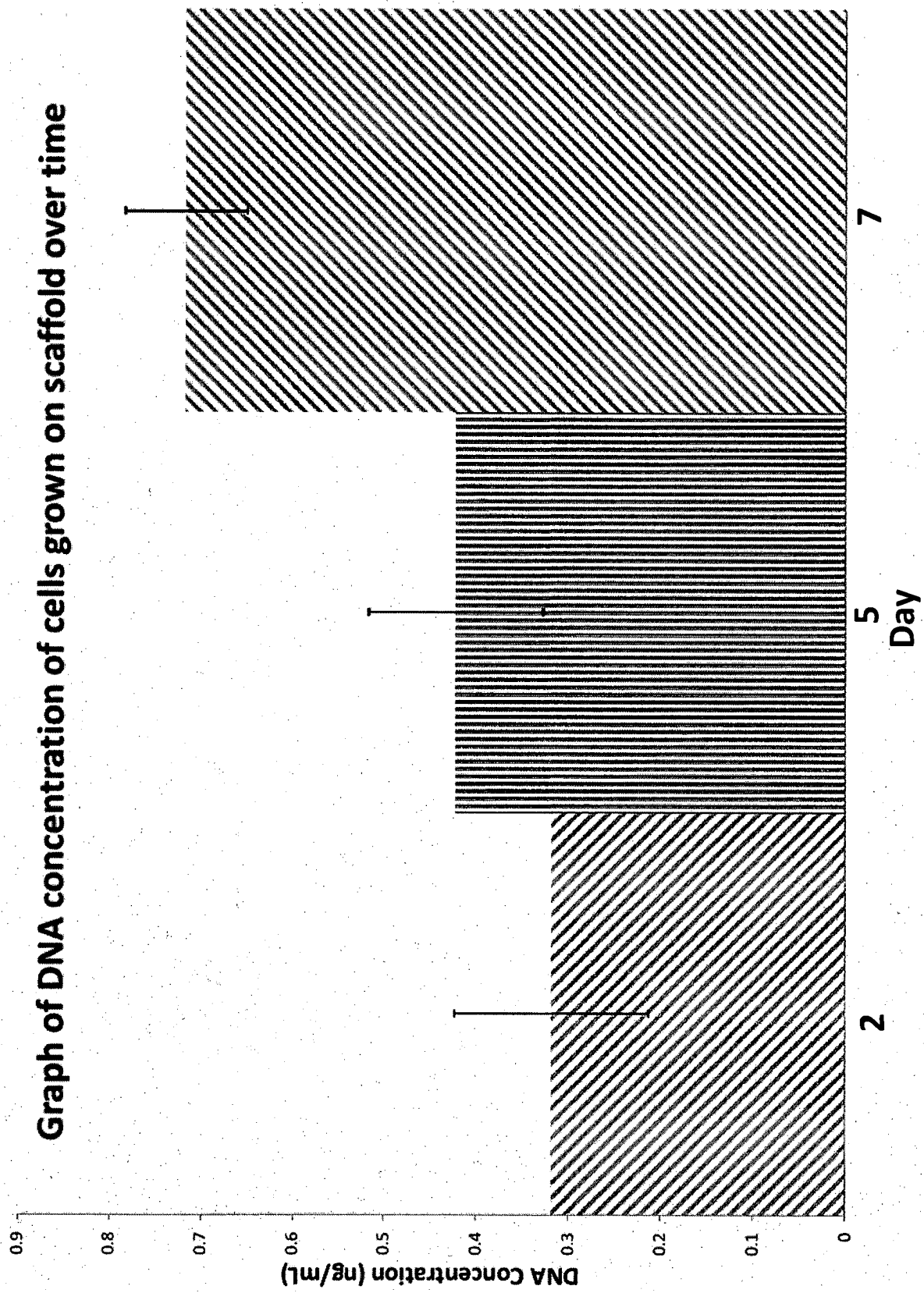


Figure 16

23/46



Figure 17

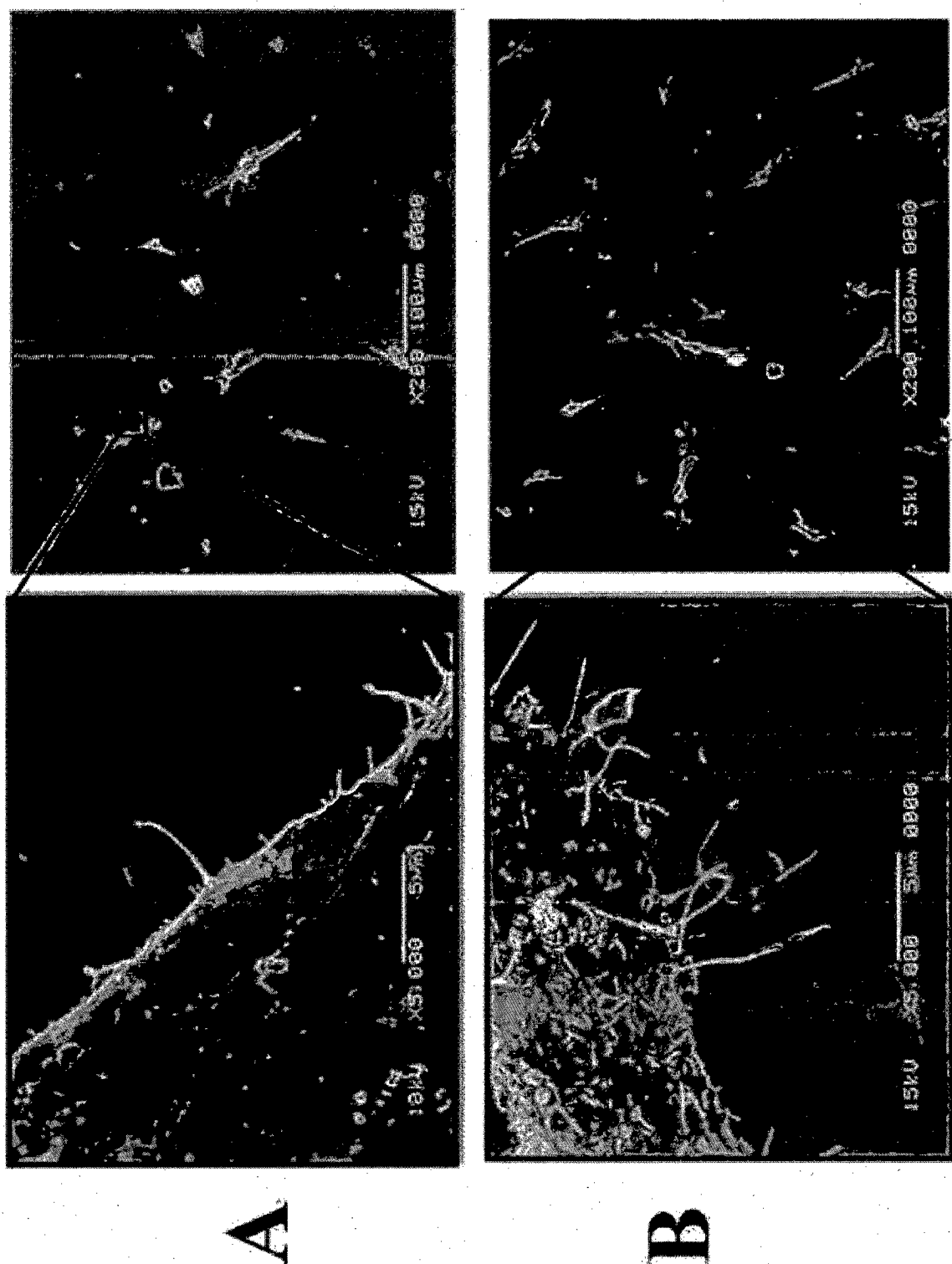


Figure 18

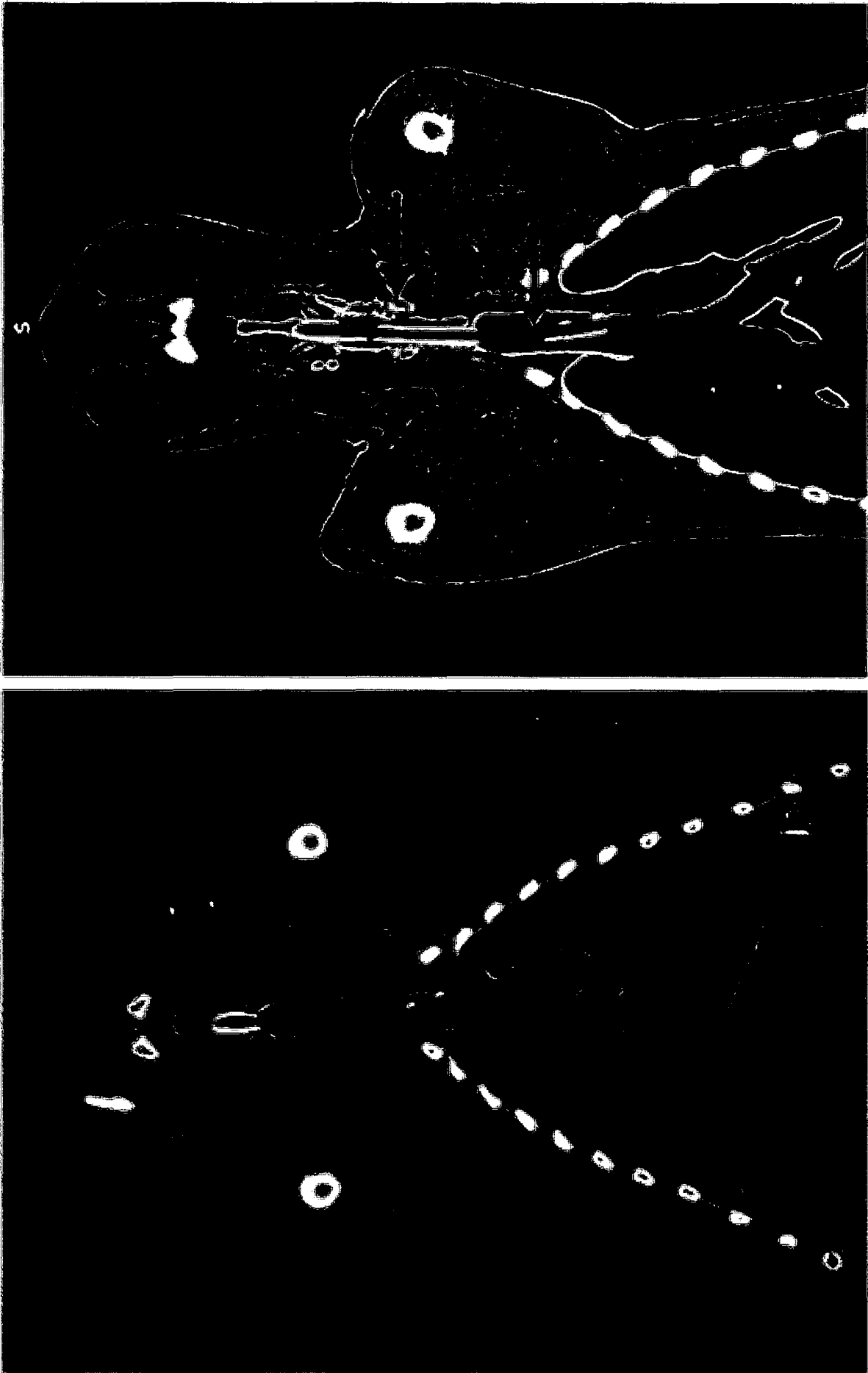


Figure 19

26/46

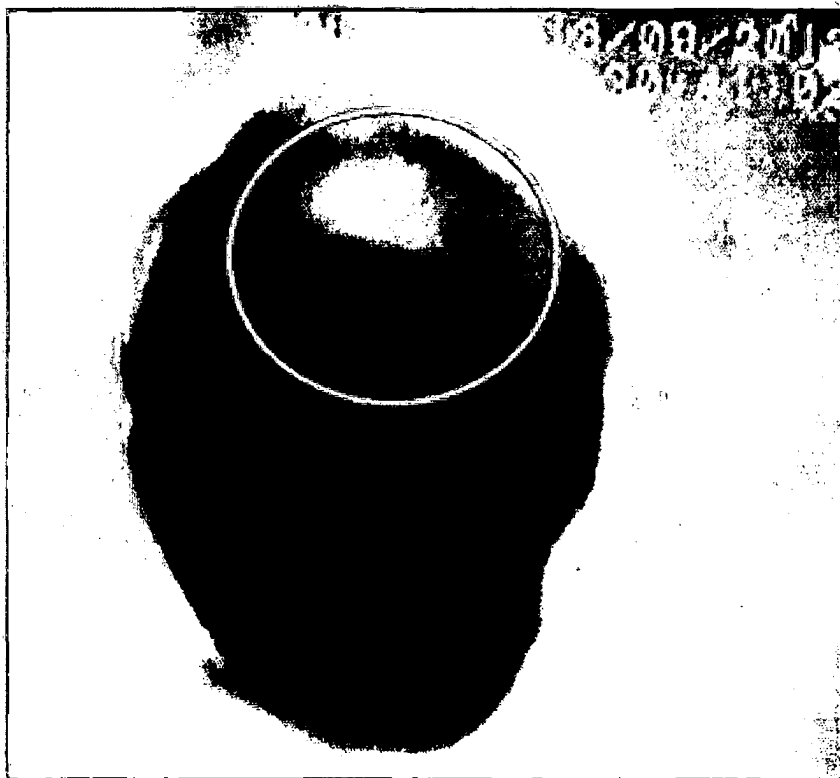
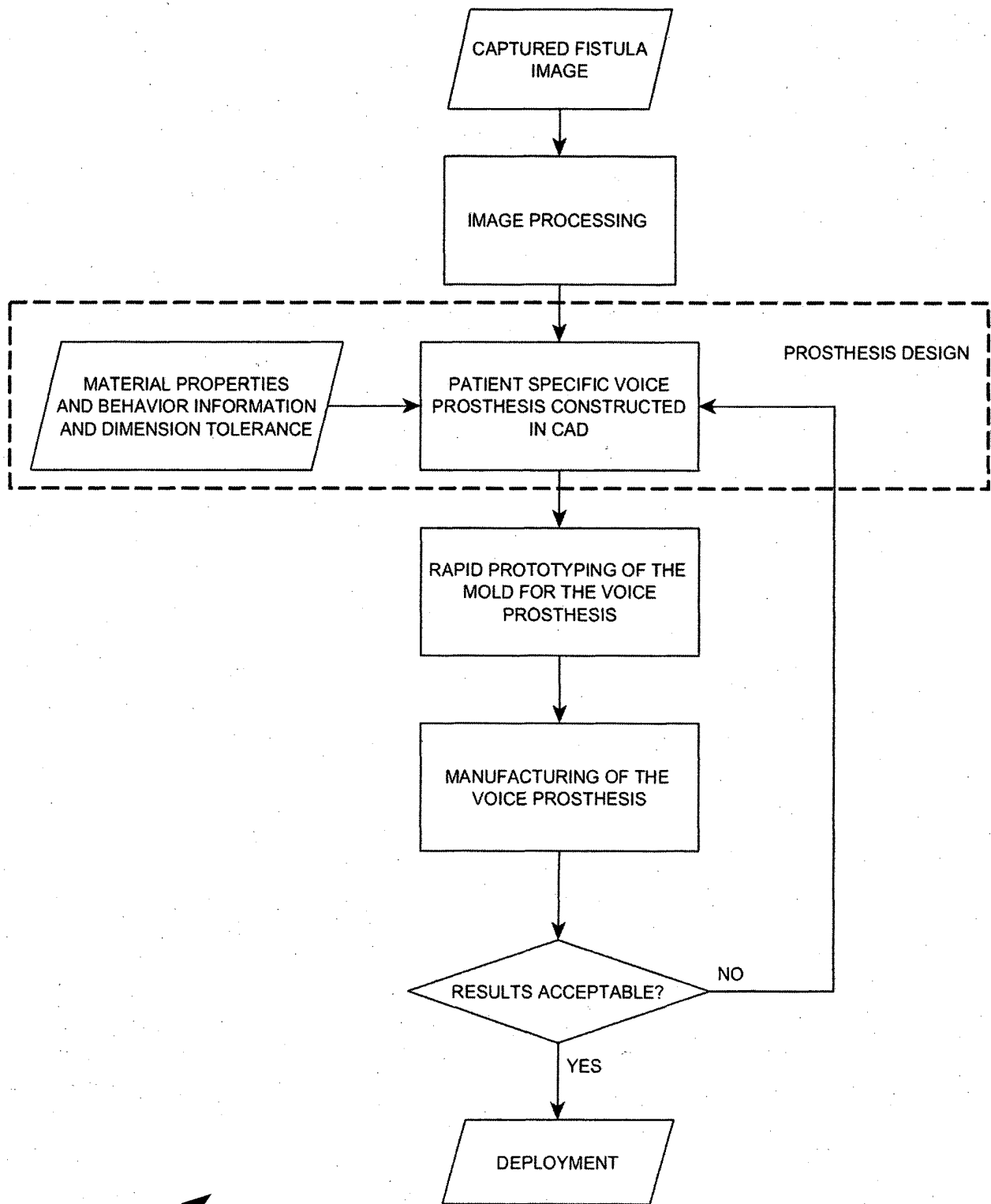


Figure 20



Figure 21

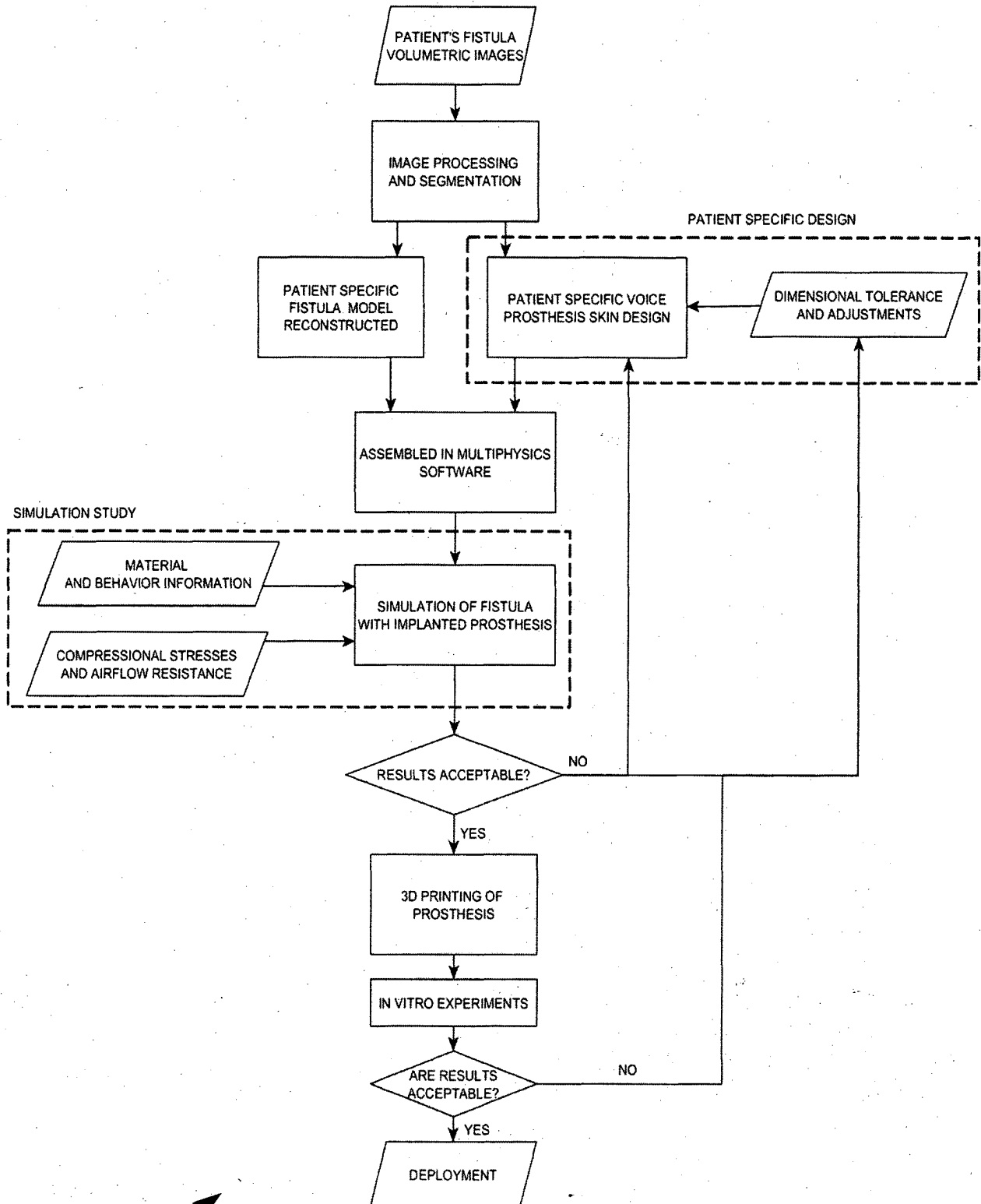
27/46



200a

Figure 22A

28/46



200b

Figure 22B

29/46

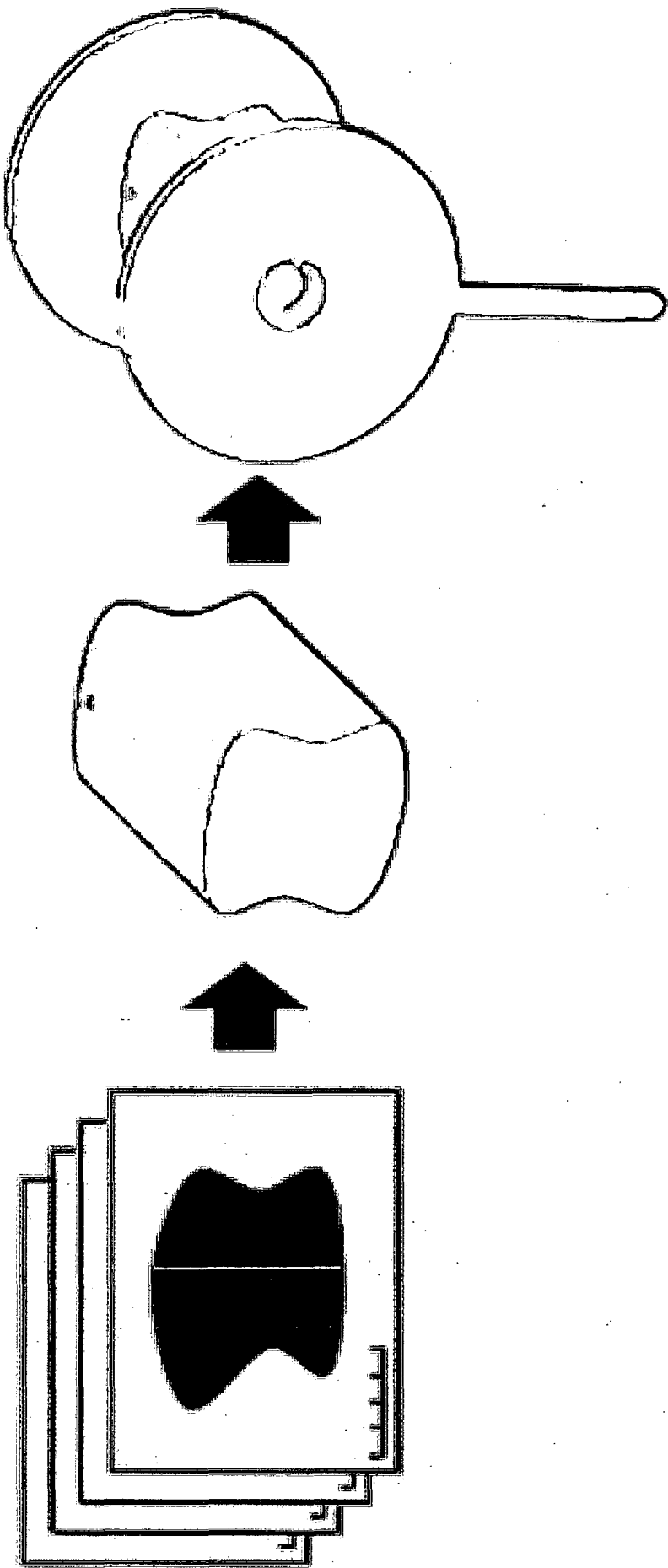


Figure 23

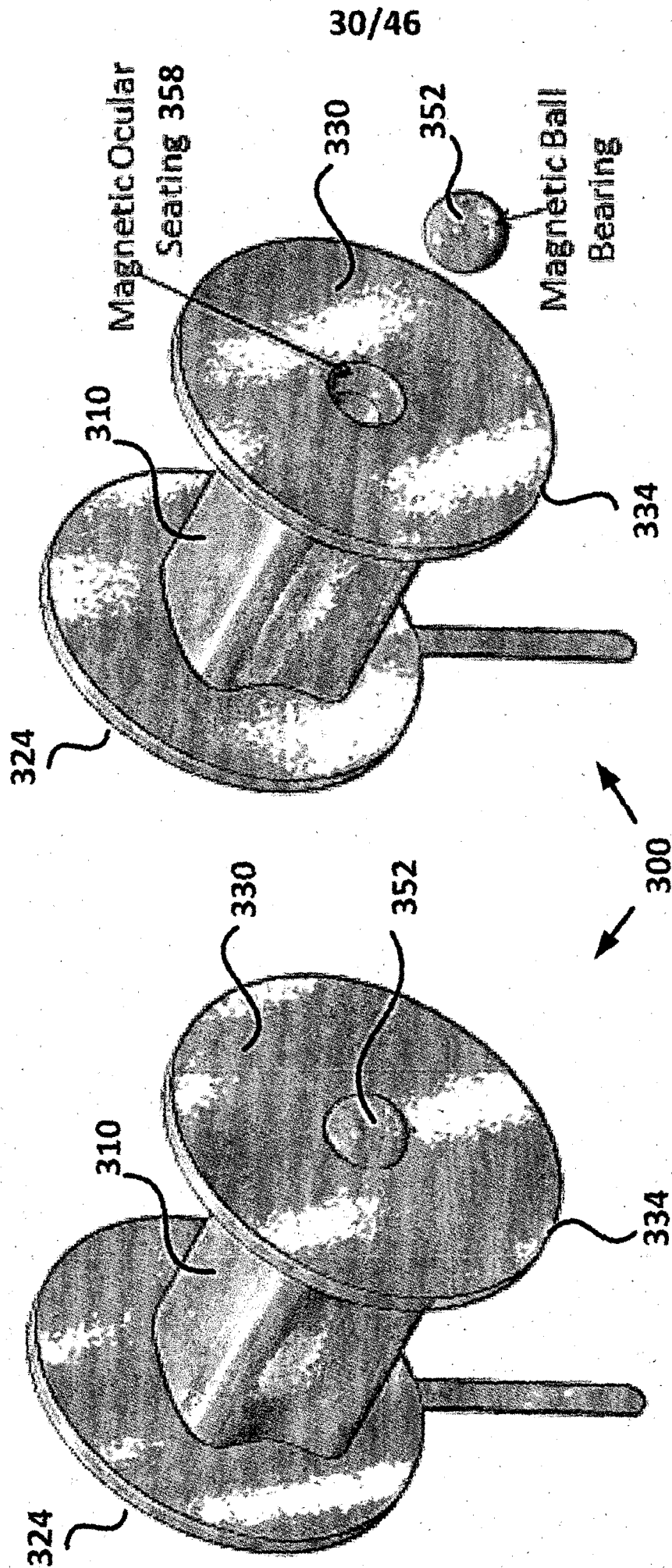


Figure 24

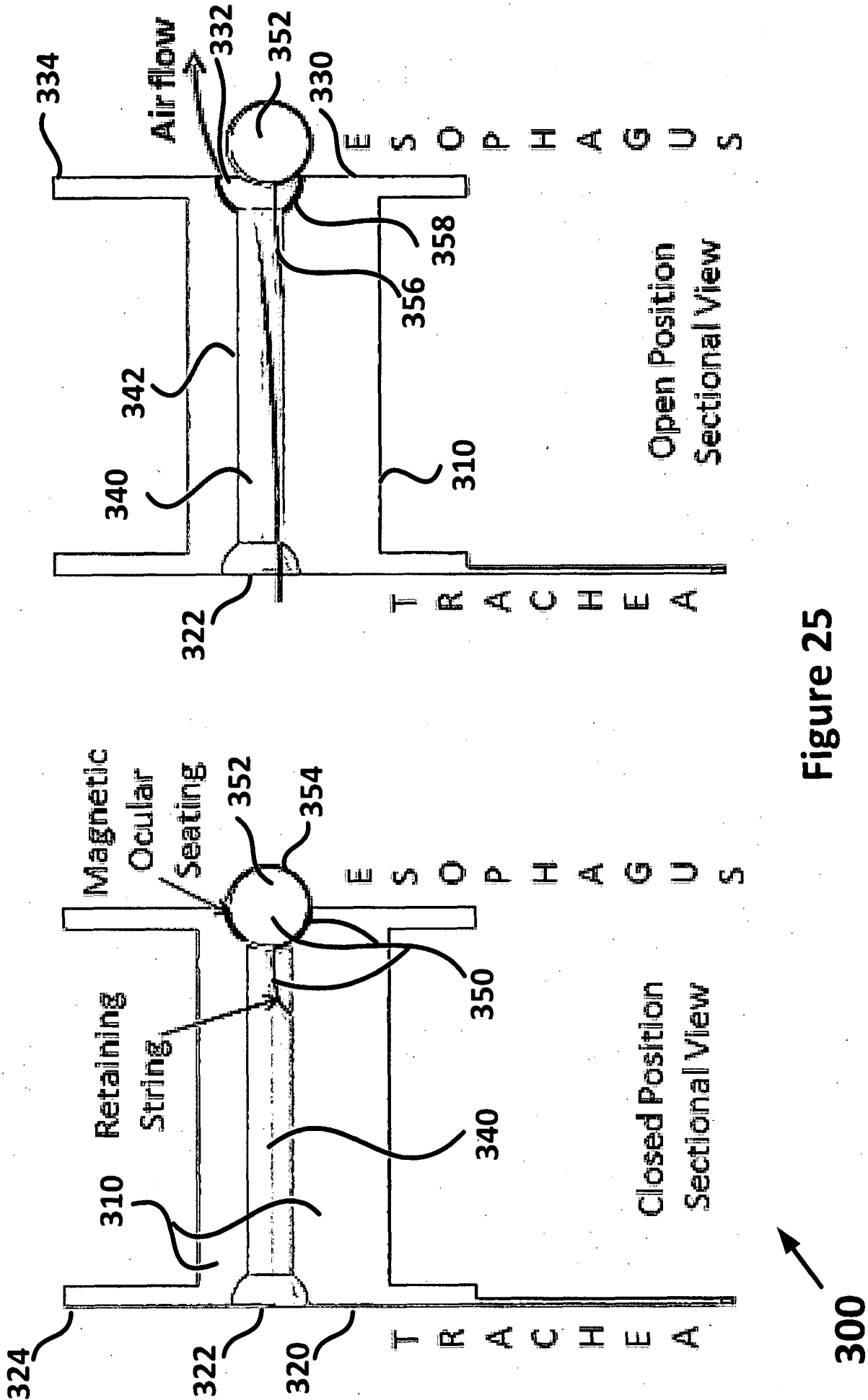


Figure 25

32/46

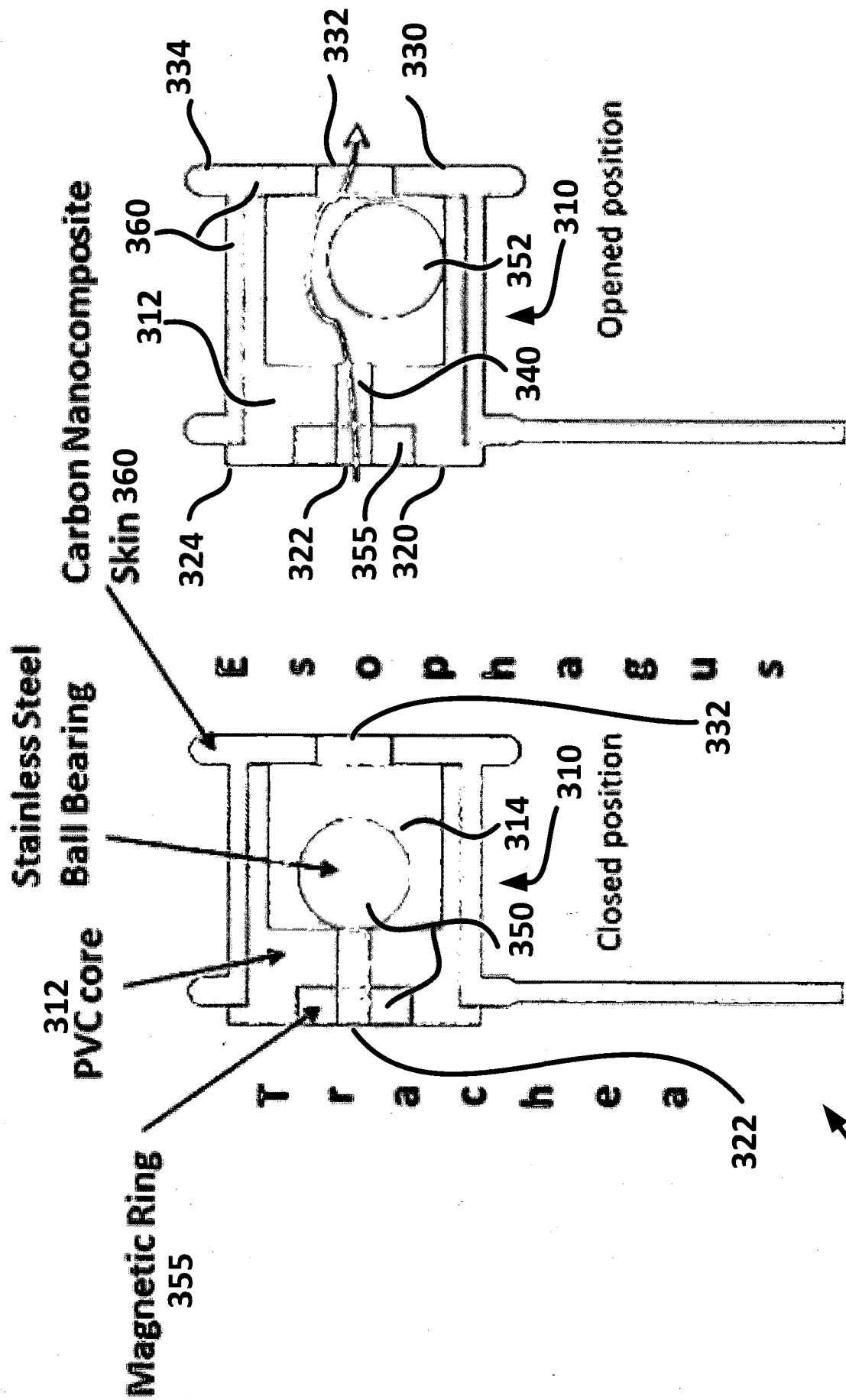


Figure 26A

300

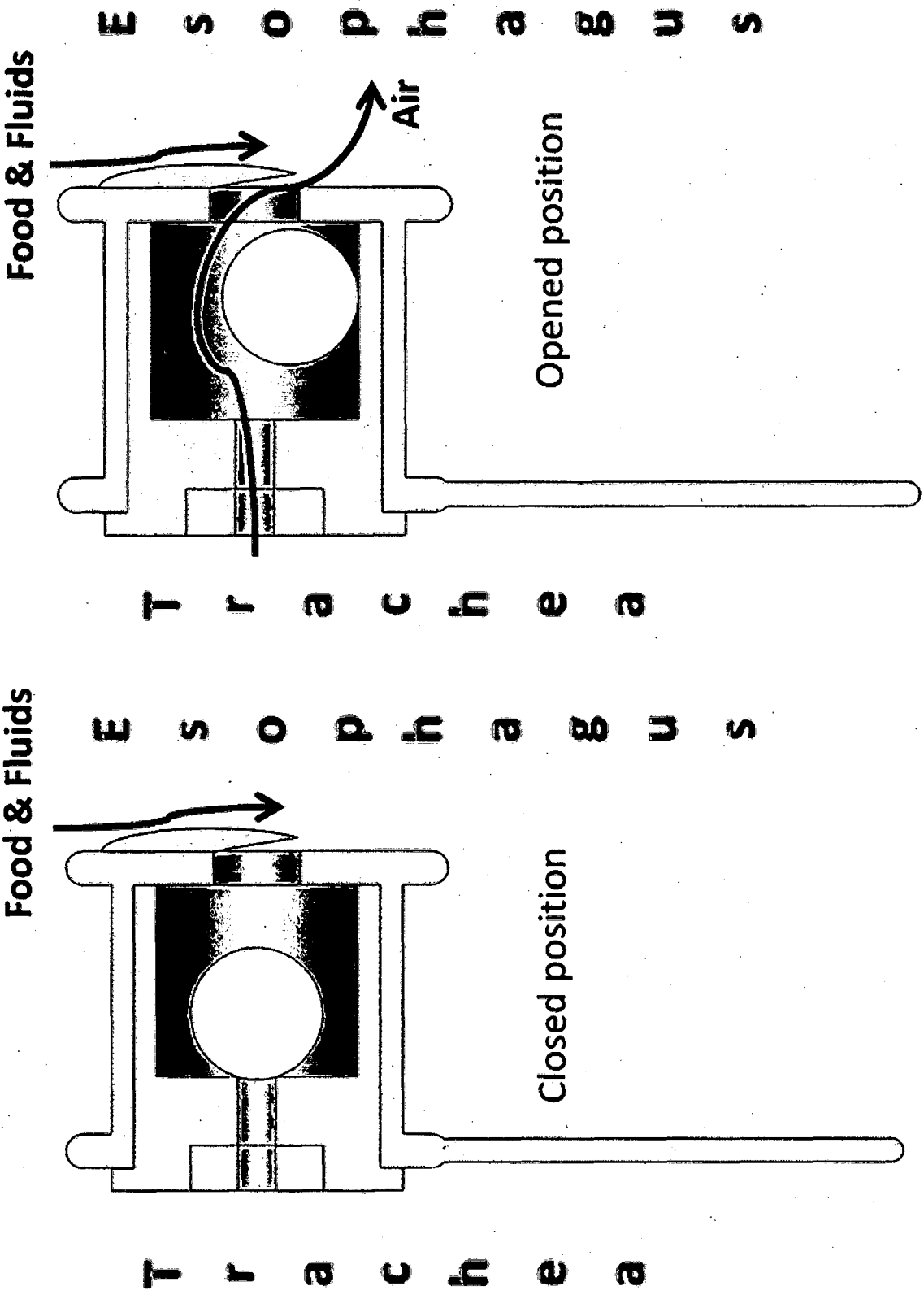


Figure 26B

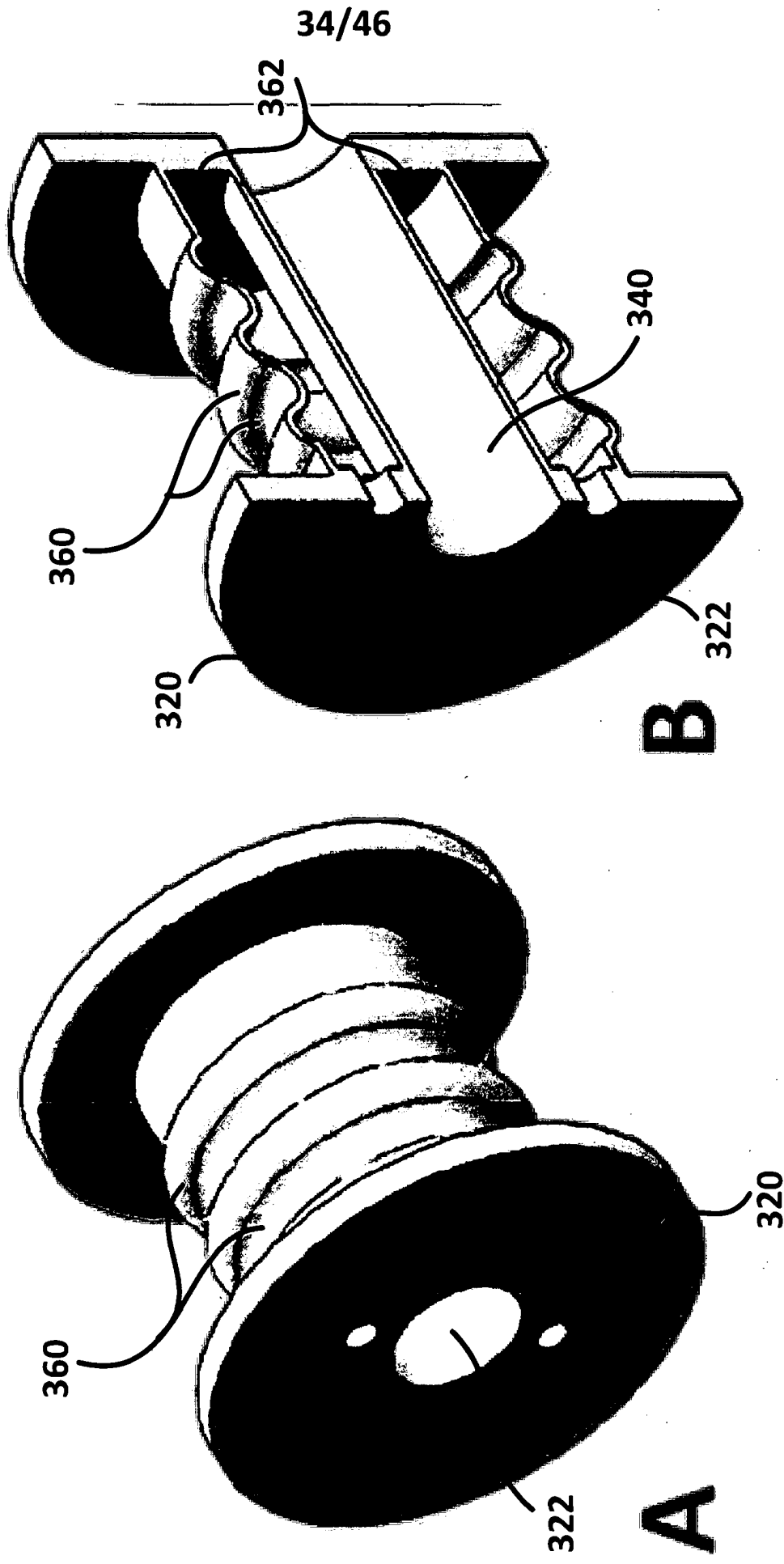


Figure 27

35/46

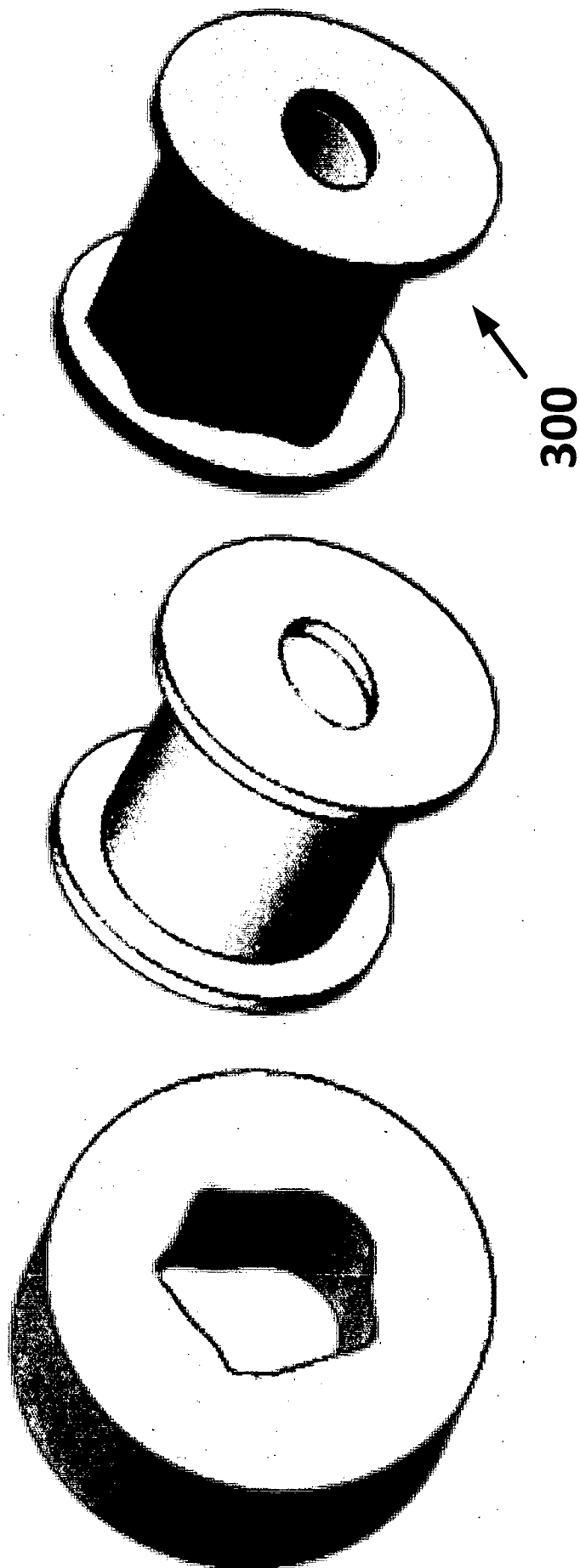


Figure 28

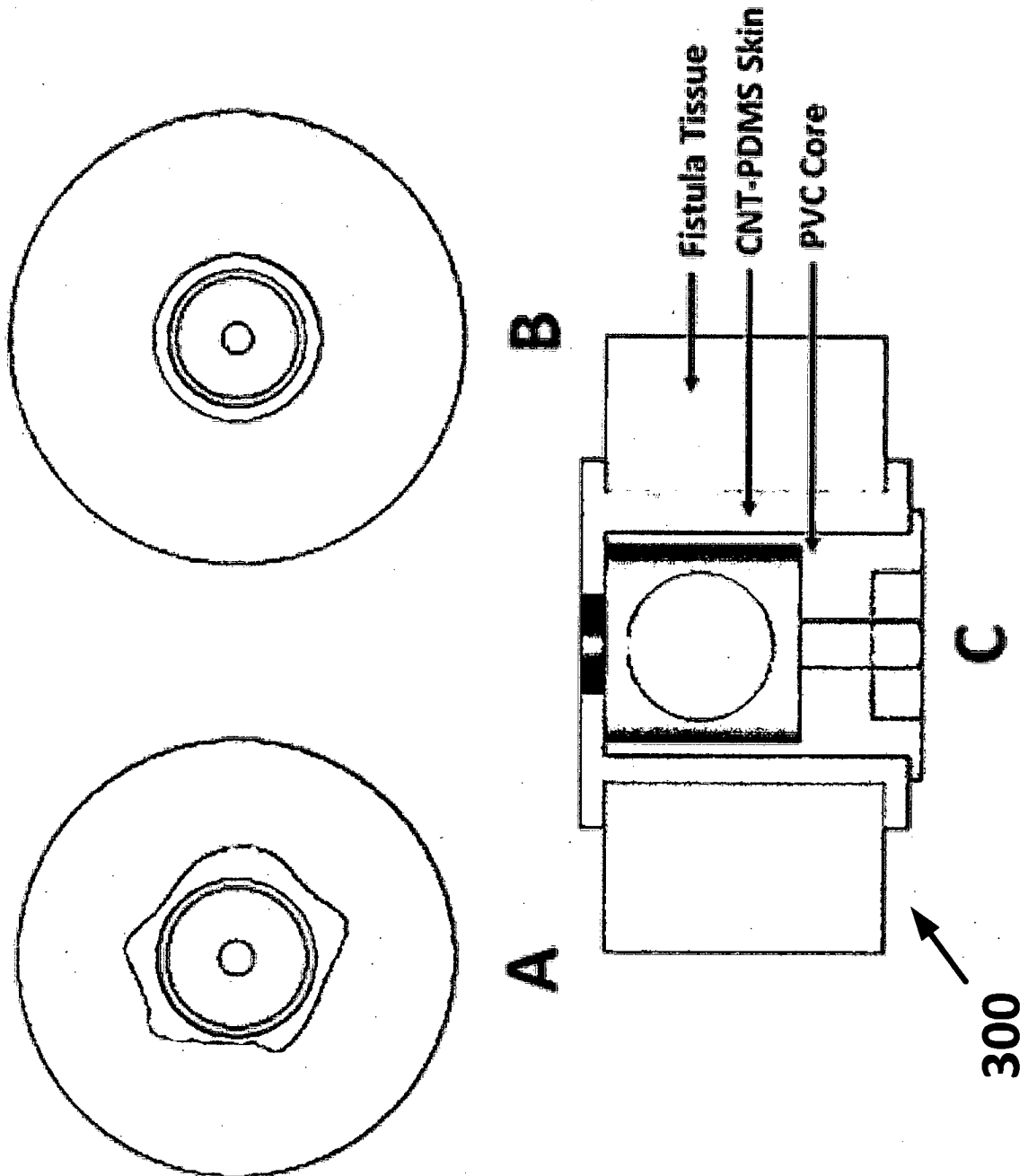


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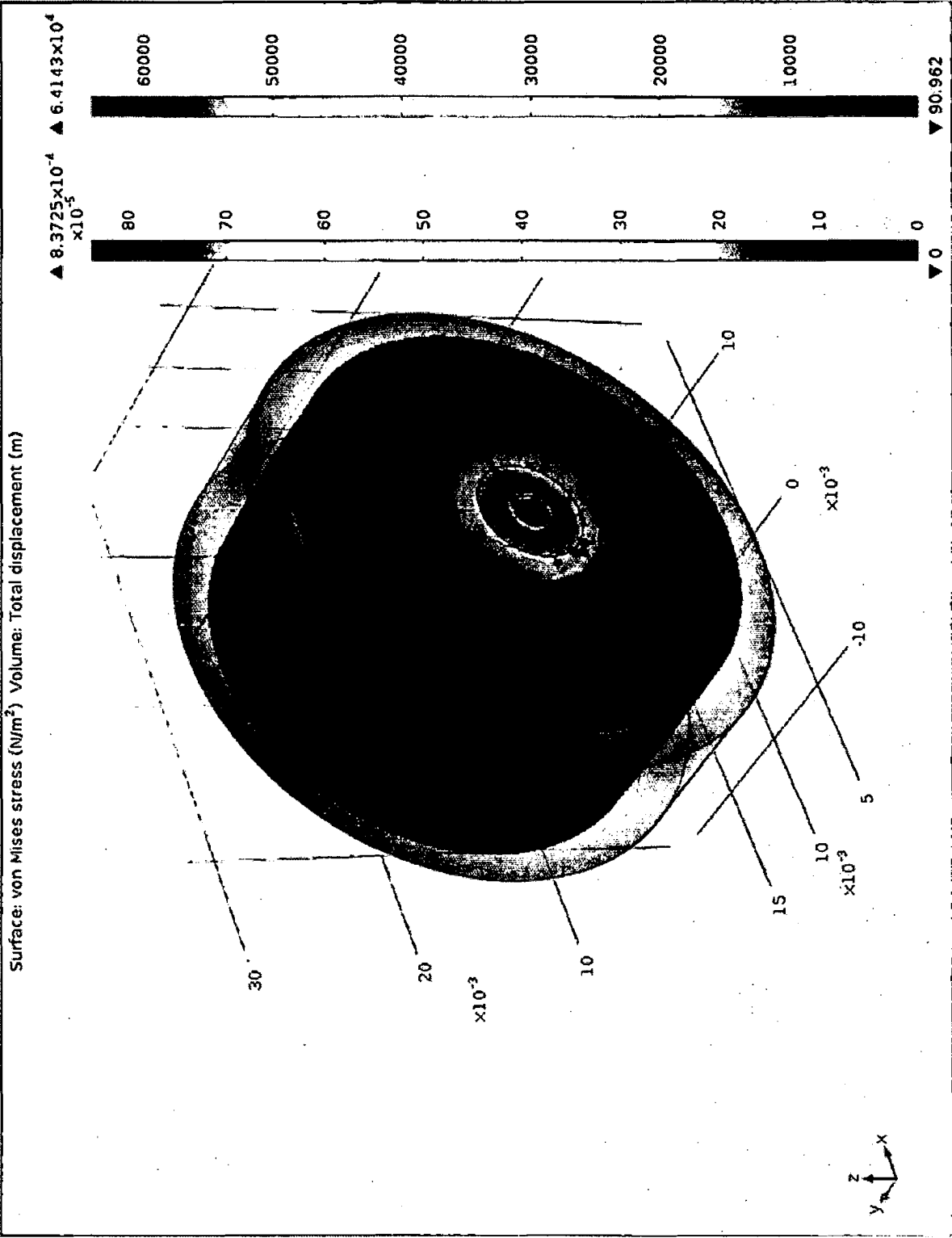


Figure 30

38/46

Min and Max Tissue Stress under Radial Compressions of 1.5, 4.5 and 9 kPa

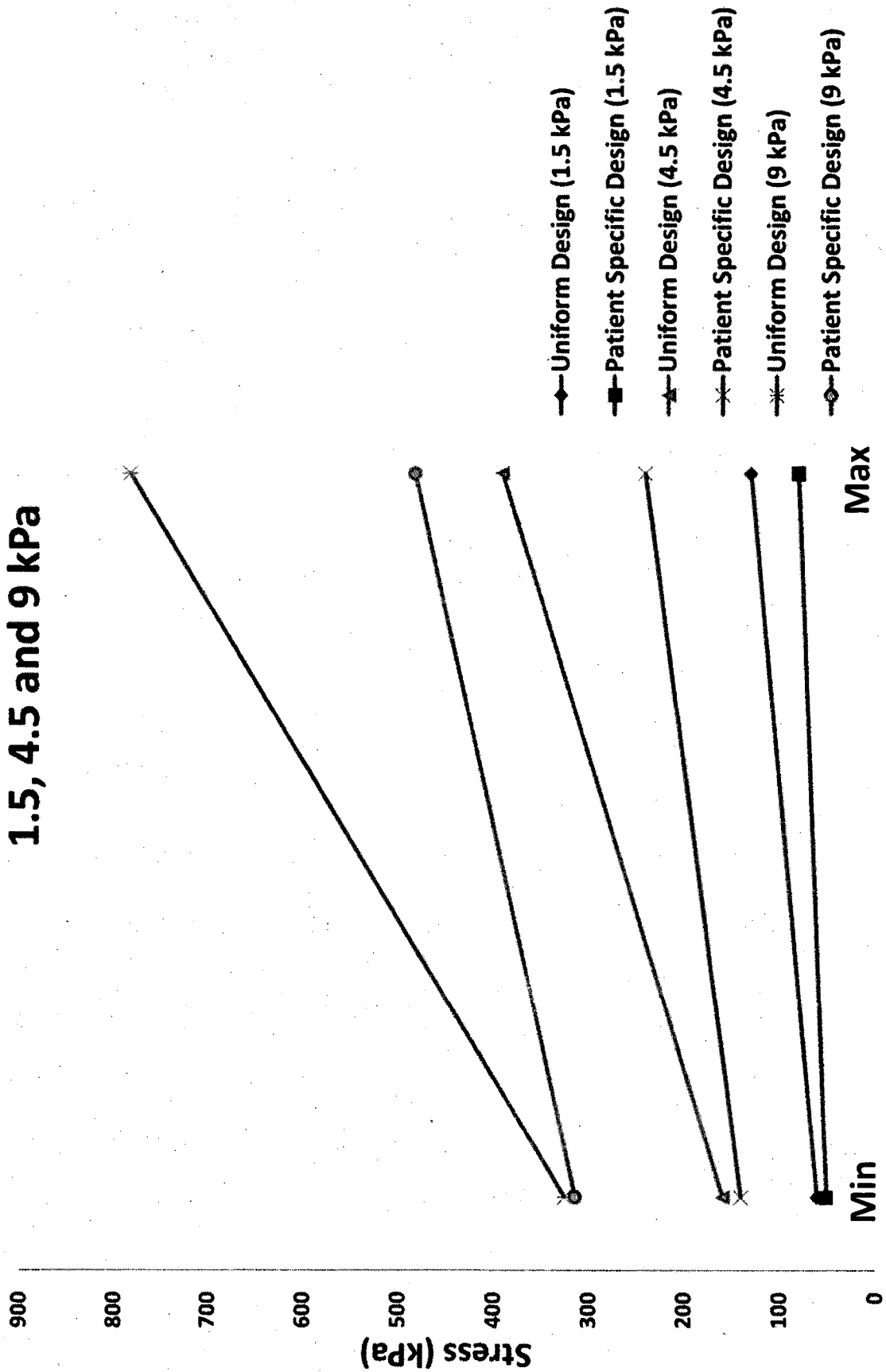


Figure 31

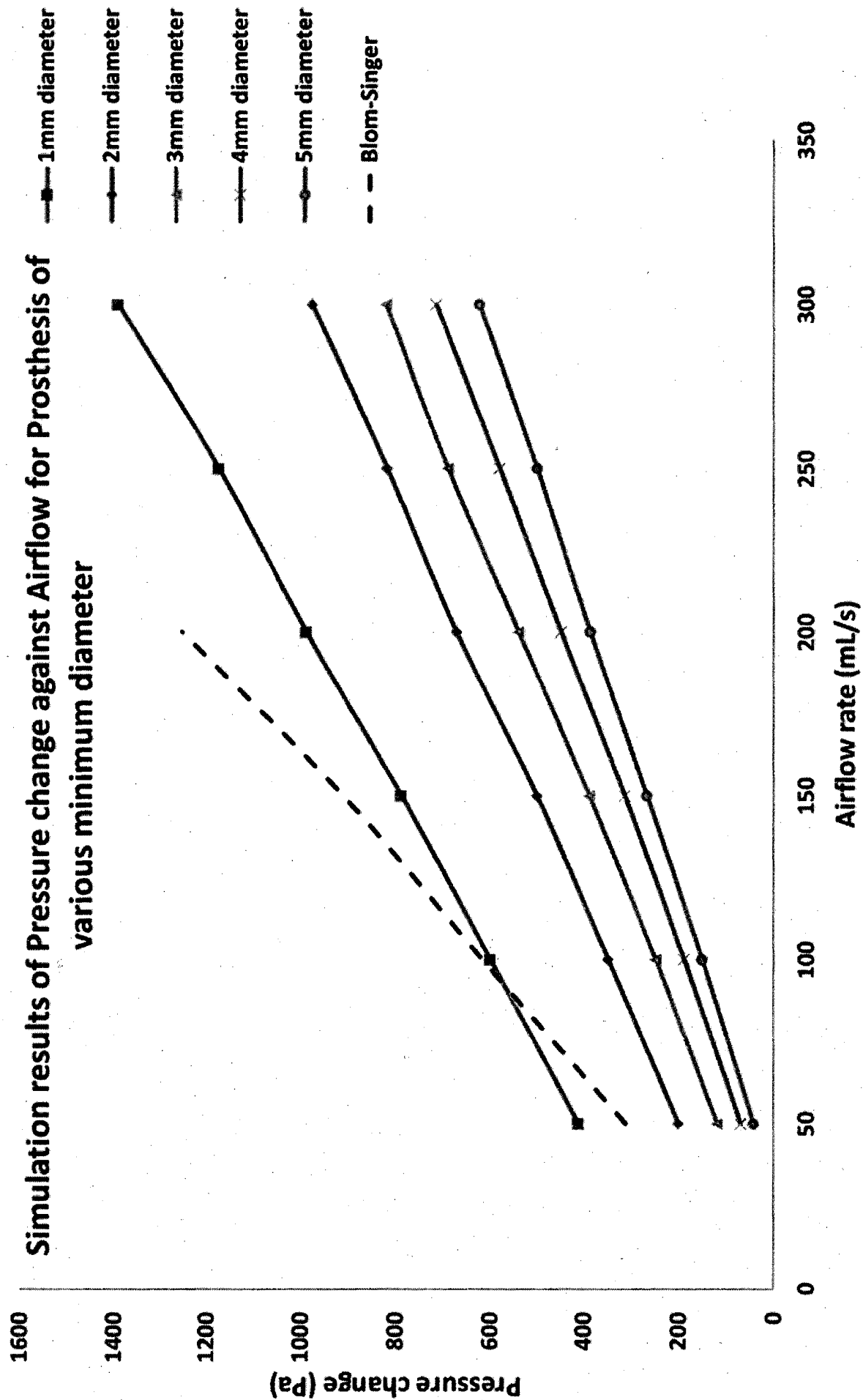


Figure 32

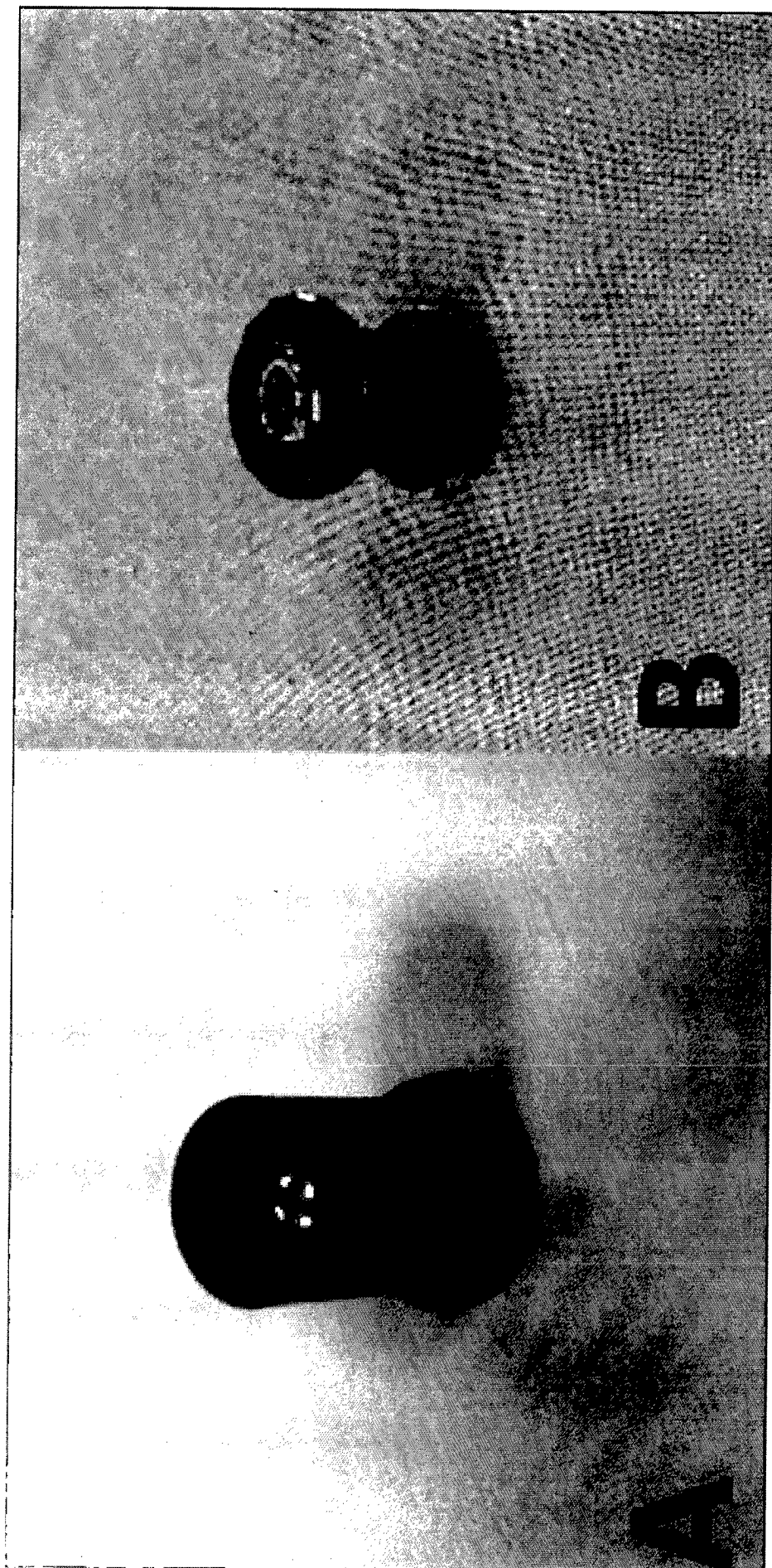


Figure 33

41/46

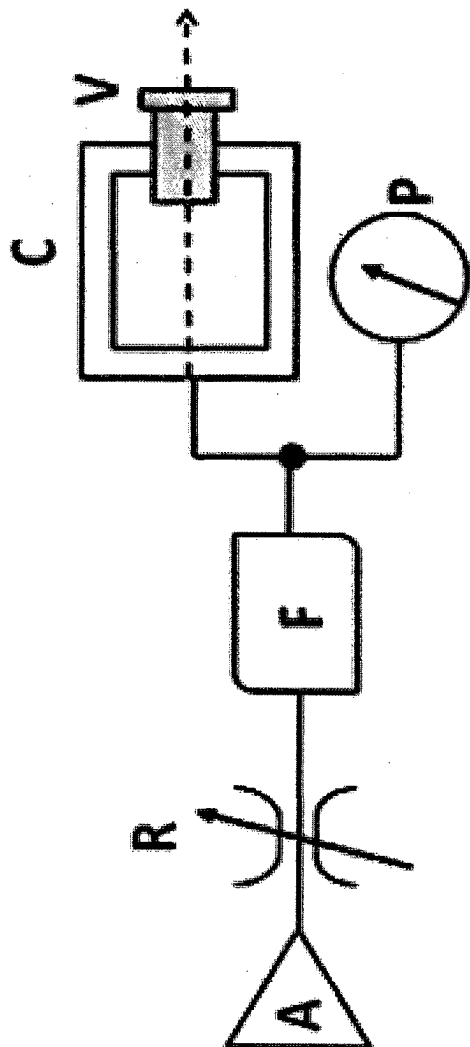
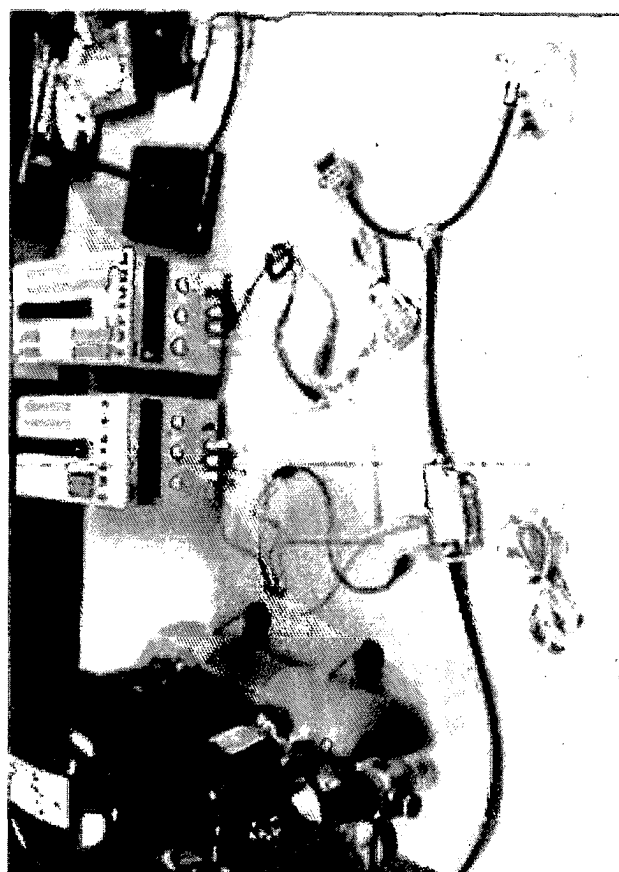


Figure 34

42/46

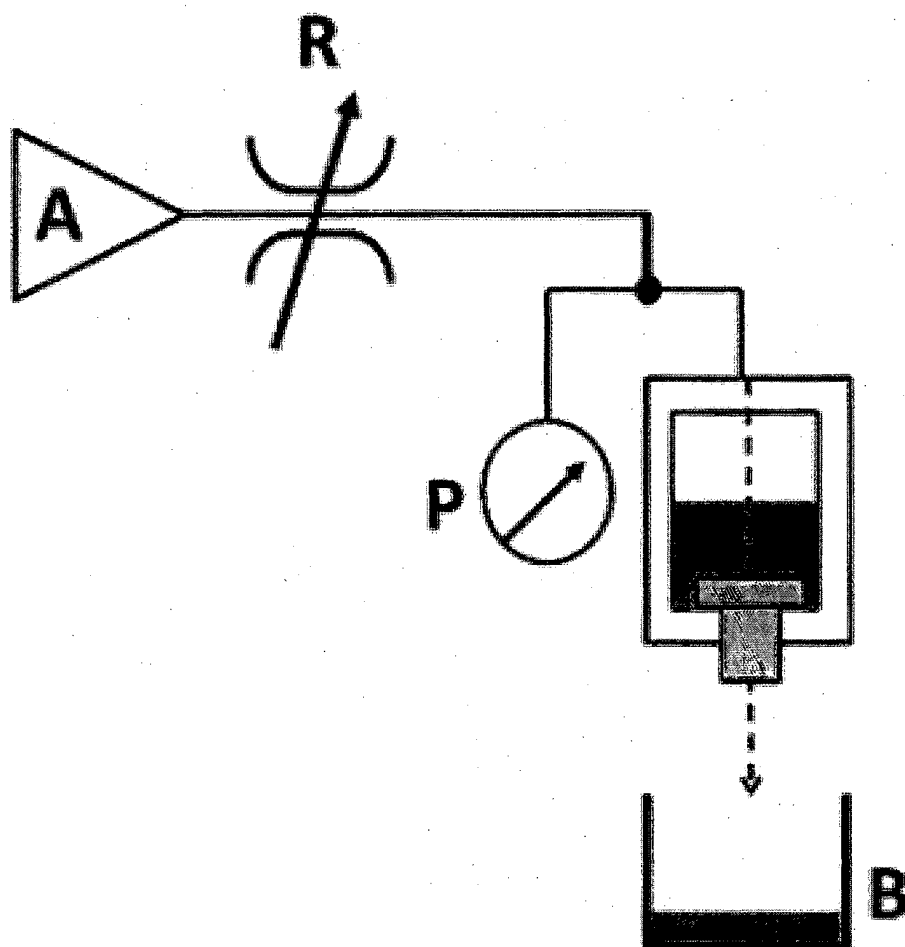


Figure 35

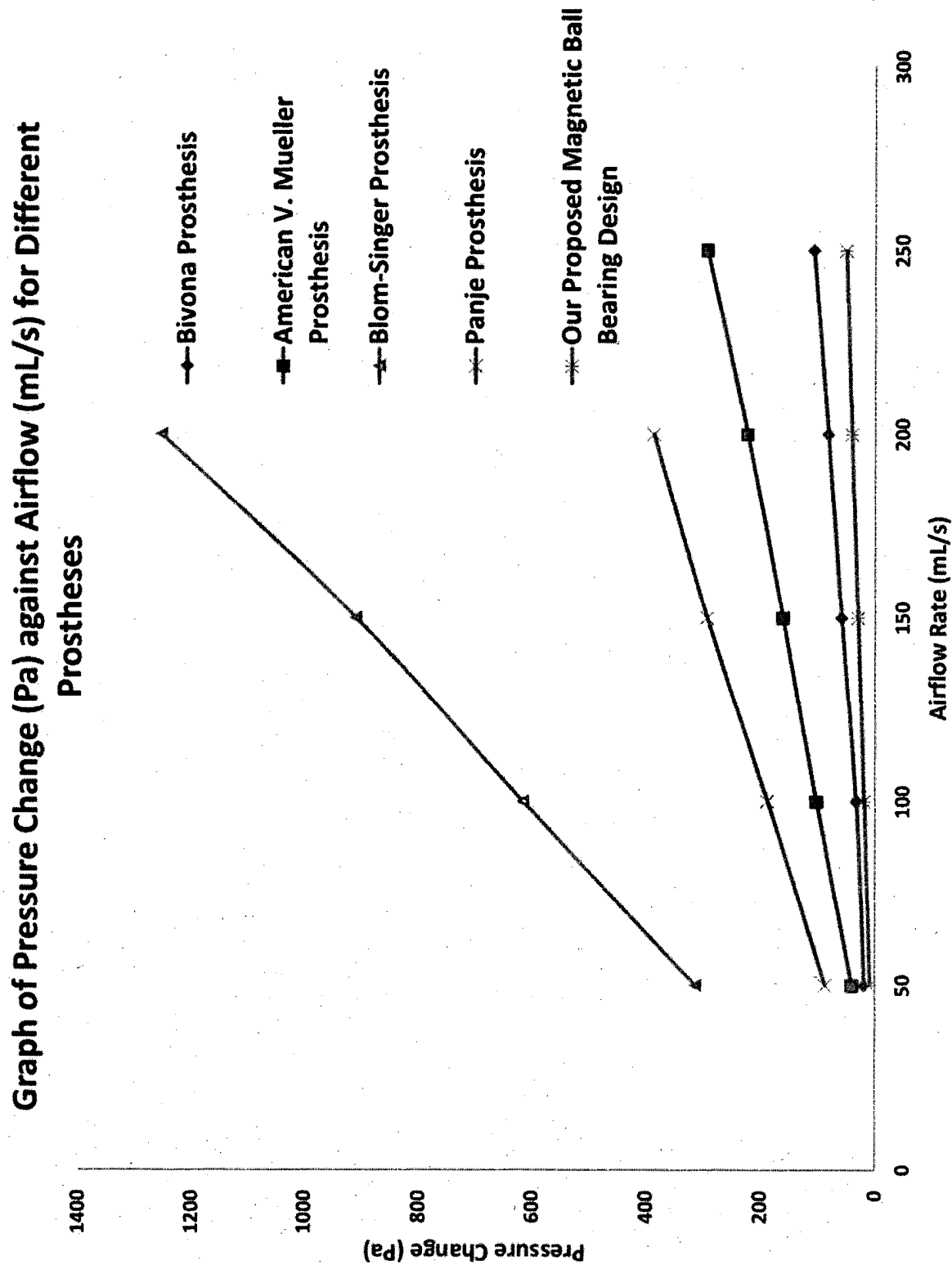


Figure 36

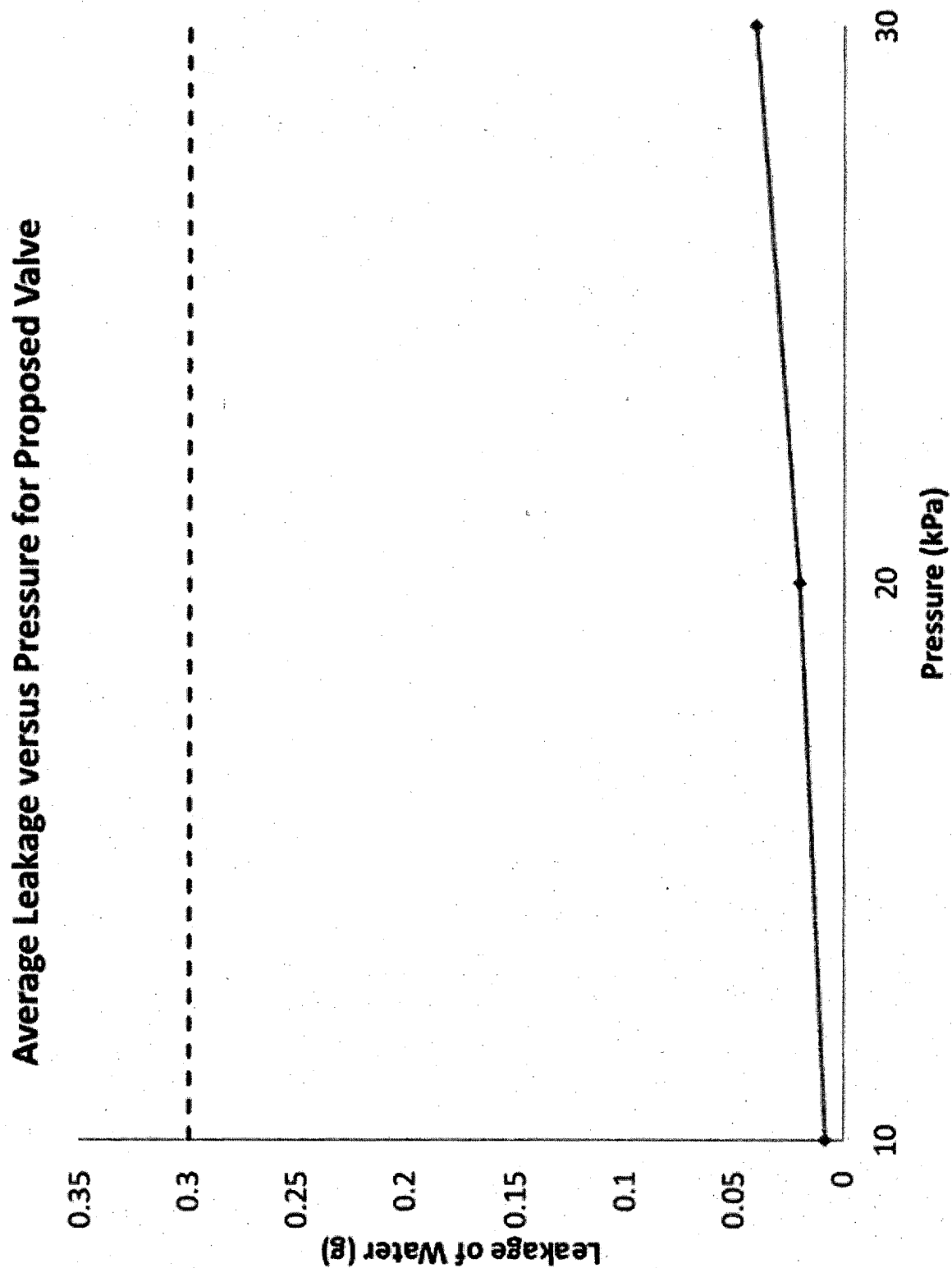


Figure 37

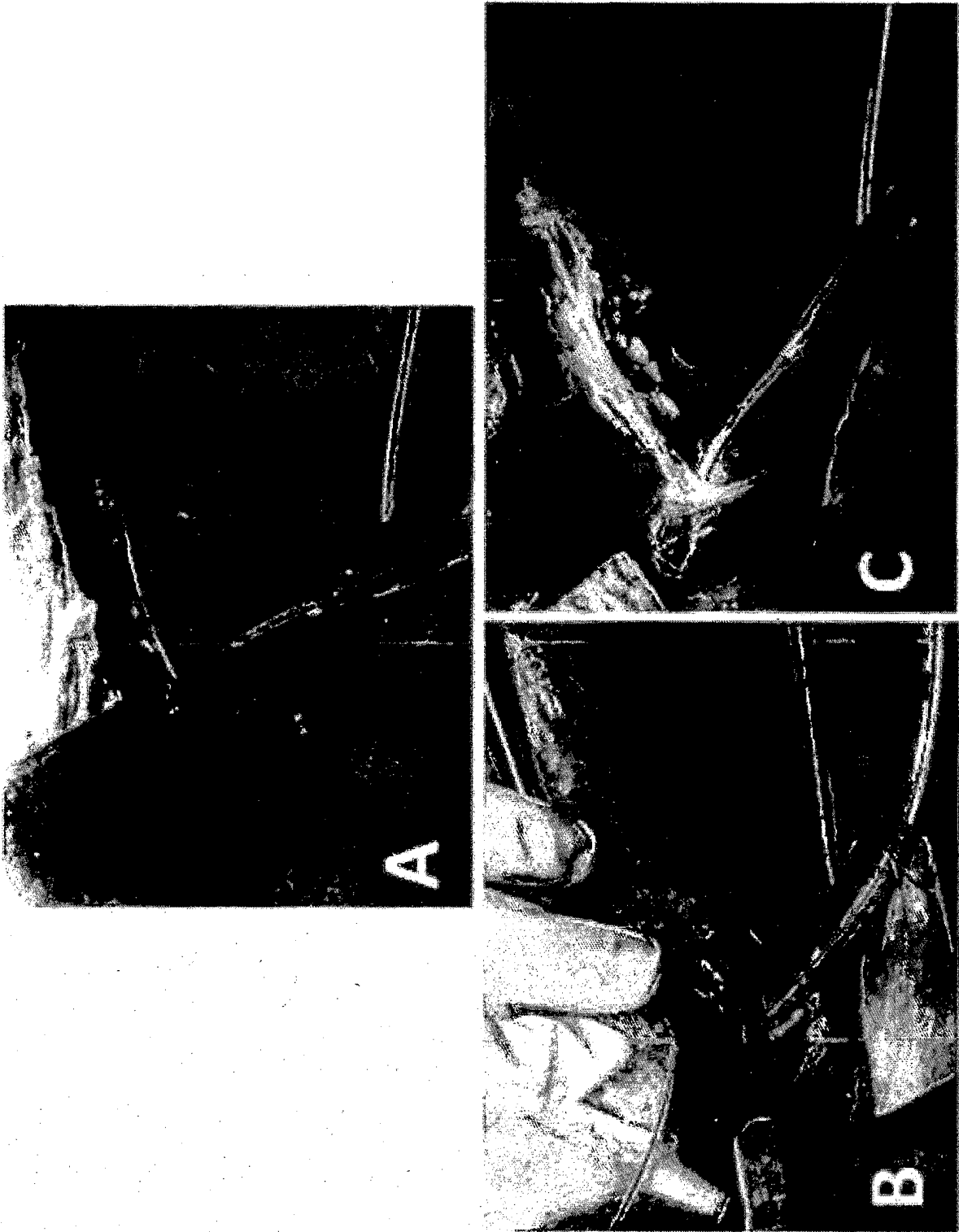


Figure 38

46/46

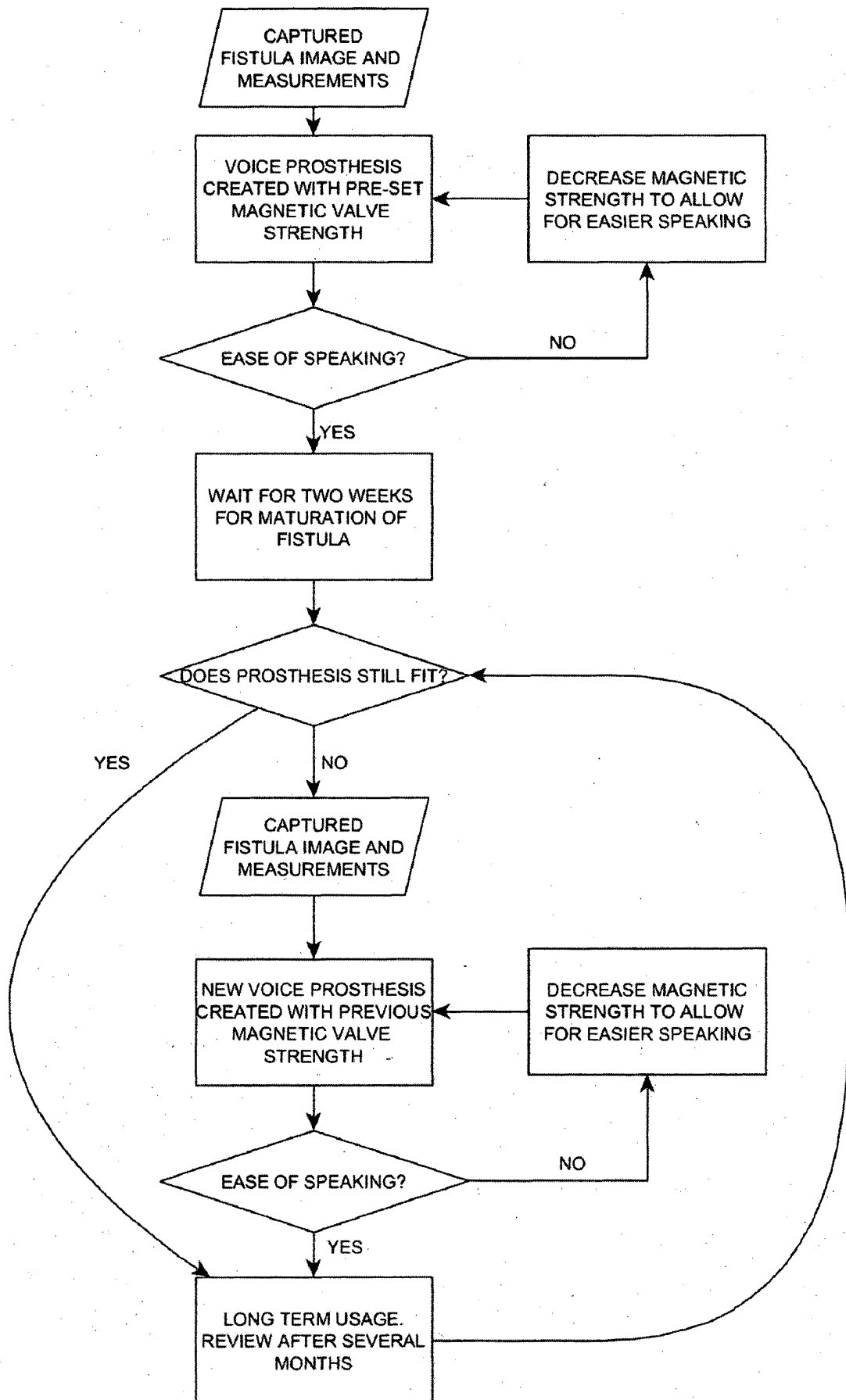


Figure 39