

1/11

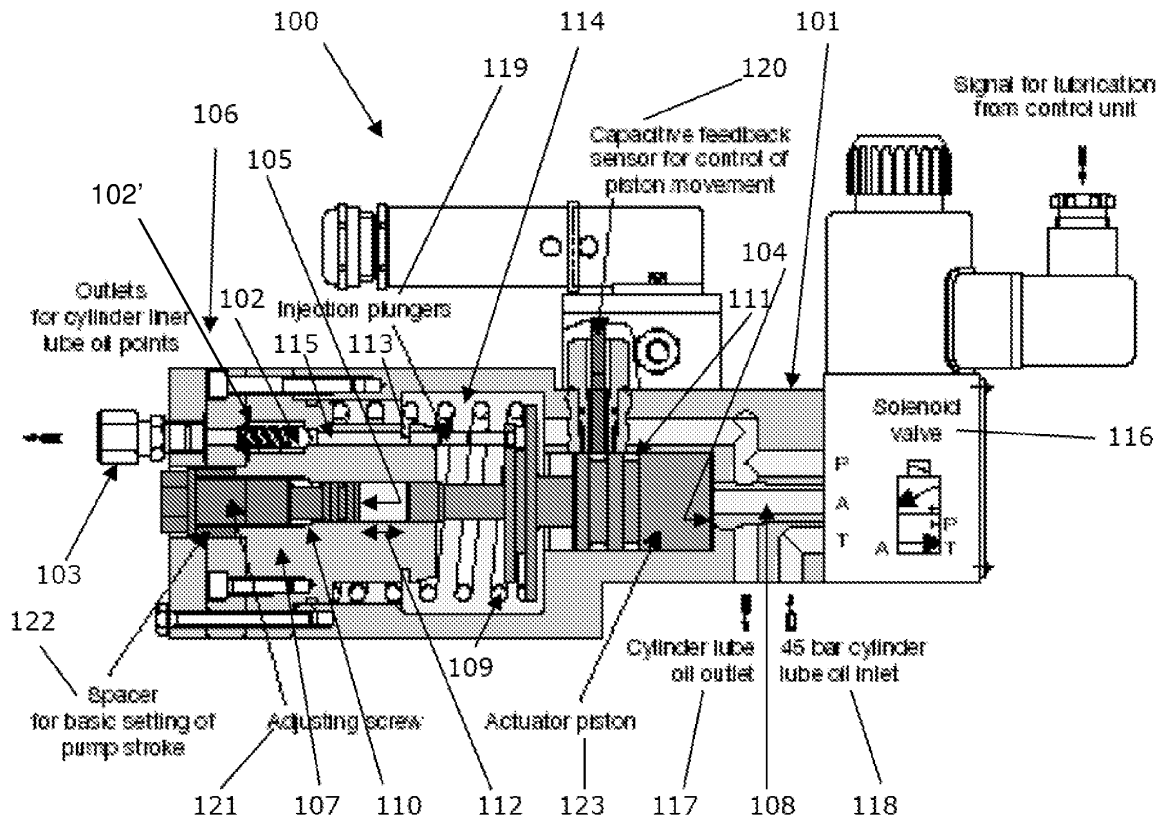


FIG. 1

(prior art - reproduced from

http://www.mariness.co.kr/02_business/Doosan%20Retrofit%20Service.pdf?PHPS

ESSID=fd56da9de6eaca2f1f446512e84fcf69.

The drawing is slightly modified with additional reference numbers in order to explain the principle in more detail.)

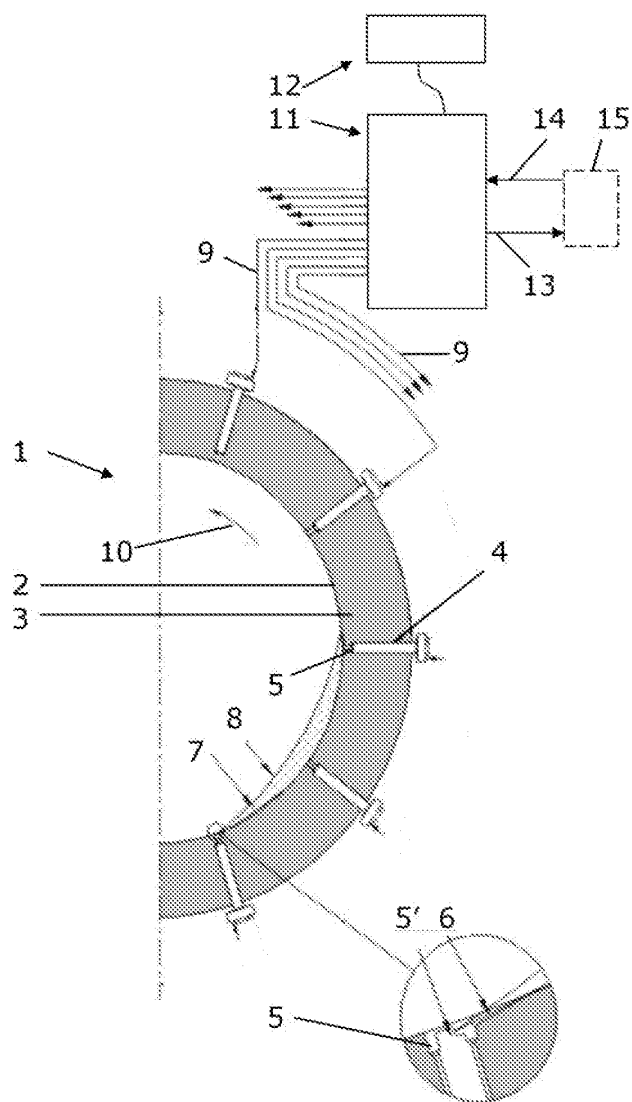


FIG. 2

3/11

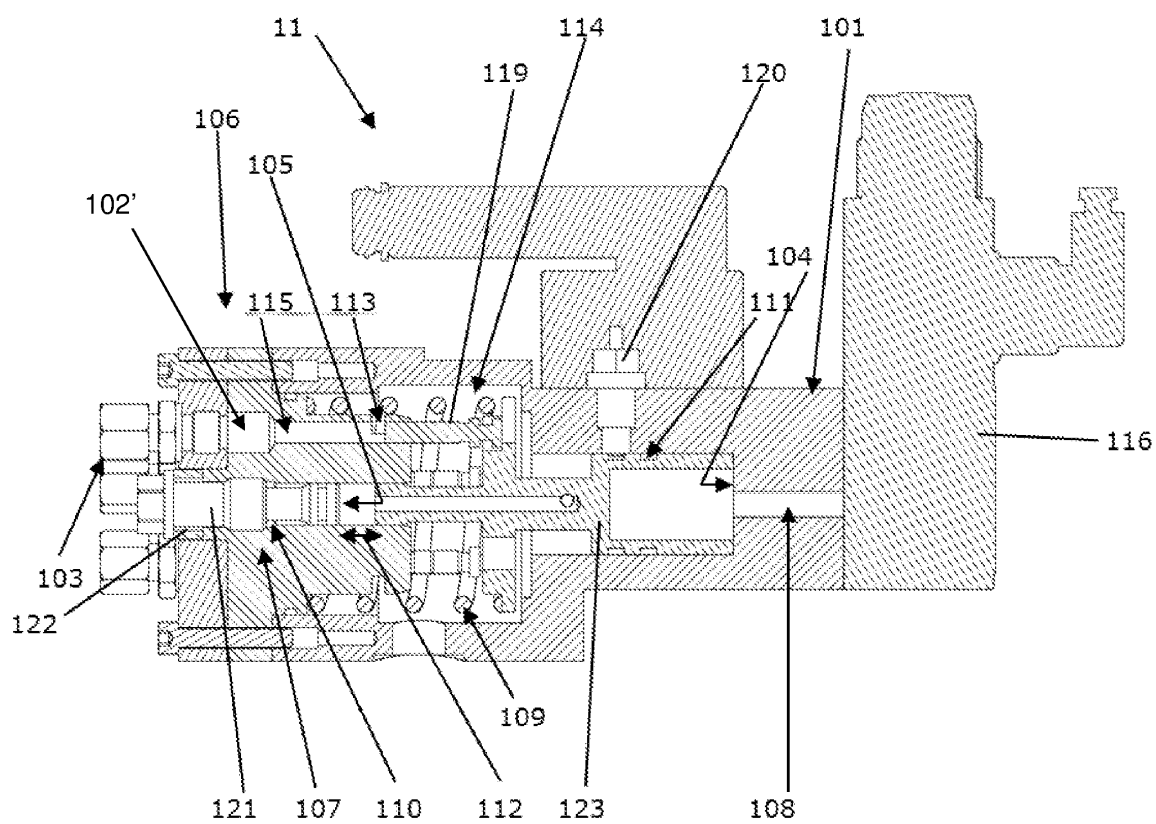


FIG. 3

4/11

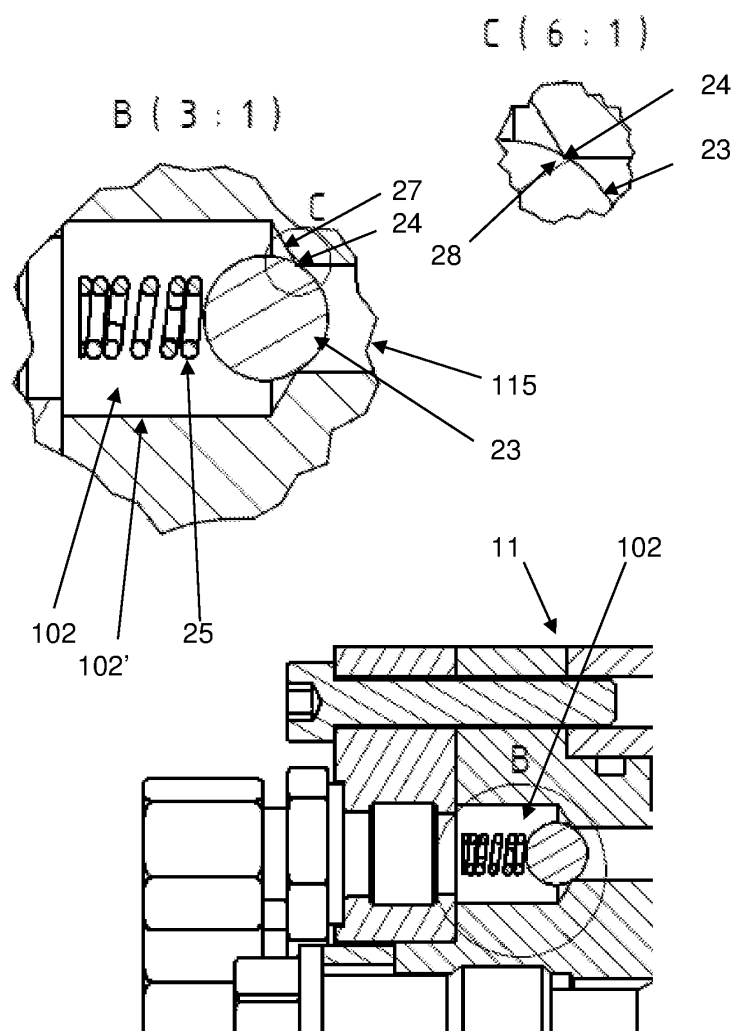


FIG. 4 (prior art)

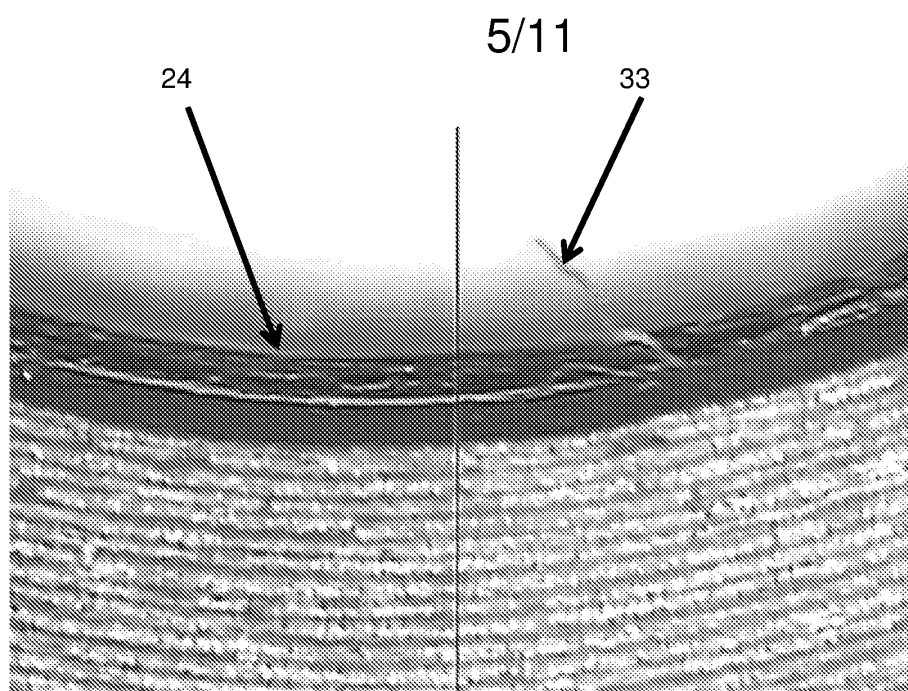


FIG. 5a

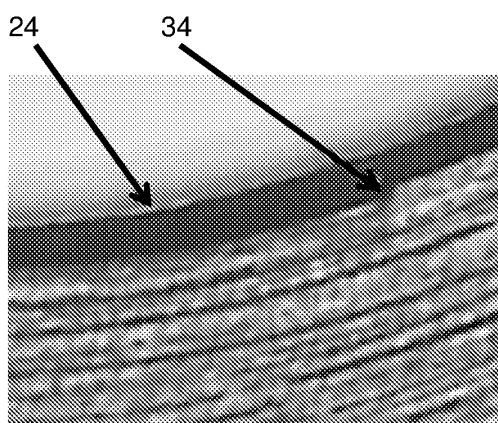


FIG. 5b

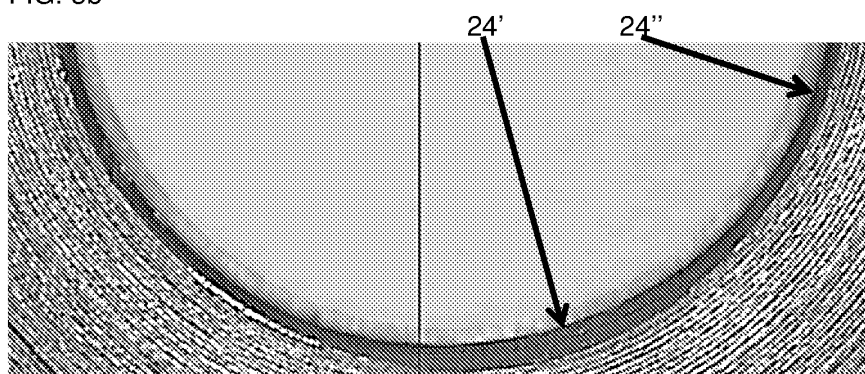


FIG. 5c

6/11

Original NRV on Alpha: HJL2 60 bar. 3850
activations 07-06-2018

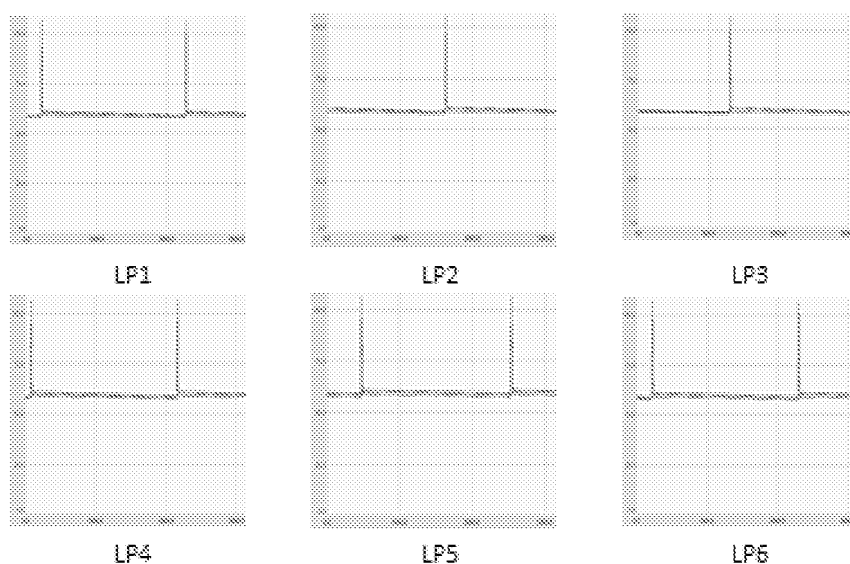


FIG. 6a

Original NRV on Alpha: HJL2 60 bar. 1.195.089
activations 25-06-2018

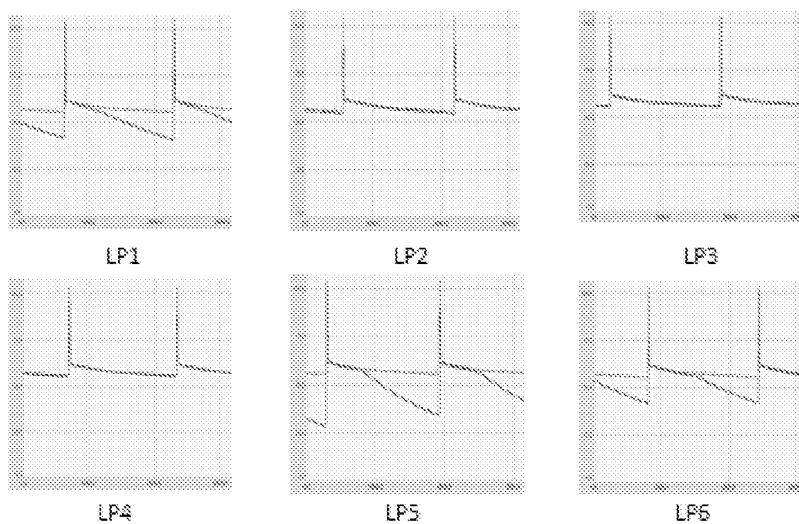


FIG. 6b

7/11

Modified ball seat in NRV: HJL2 60 bar.
2.007.921 activations 16-08-2018

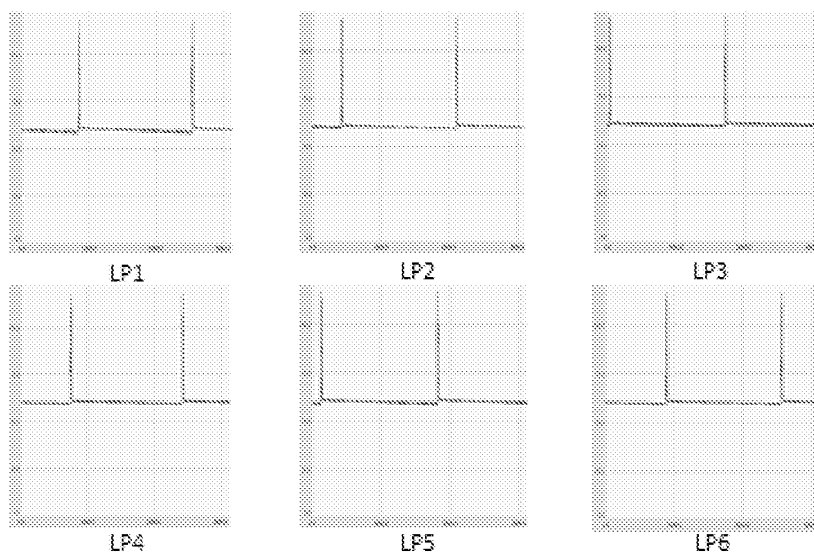


FIG. 7

8/11

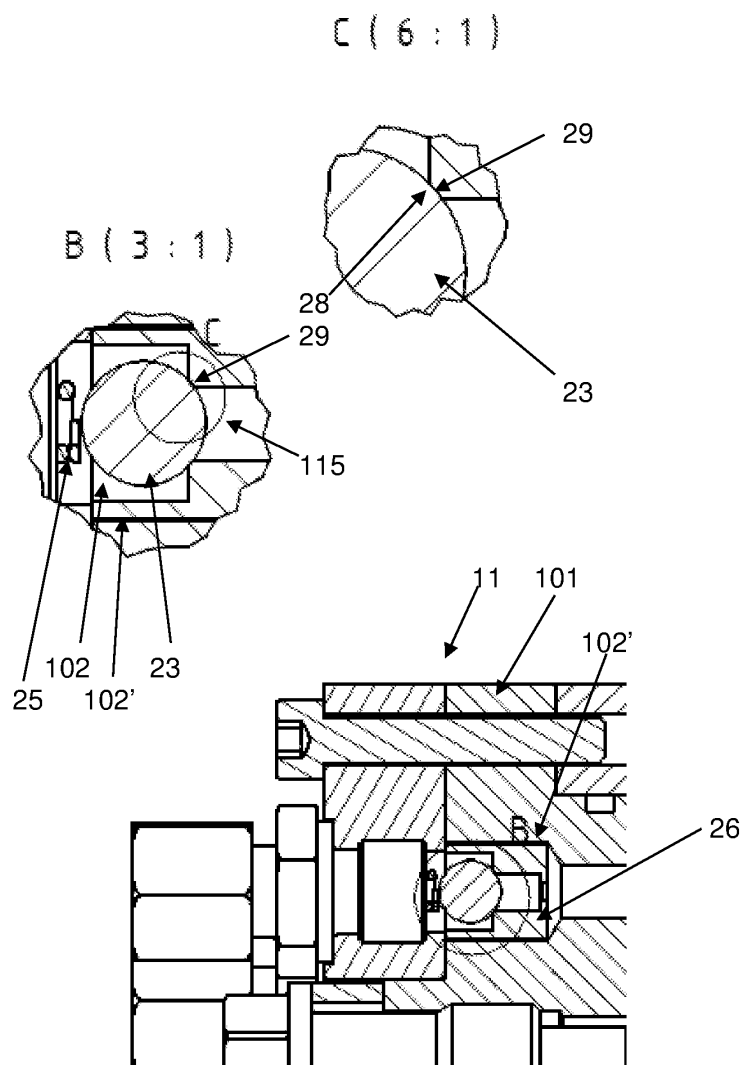


FIG. 8

9/11

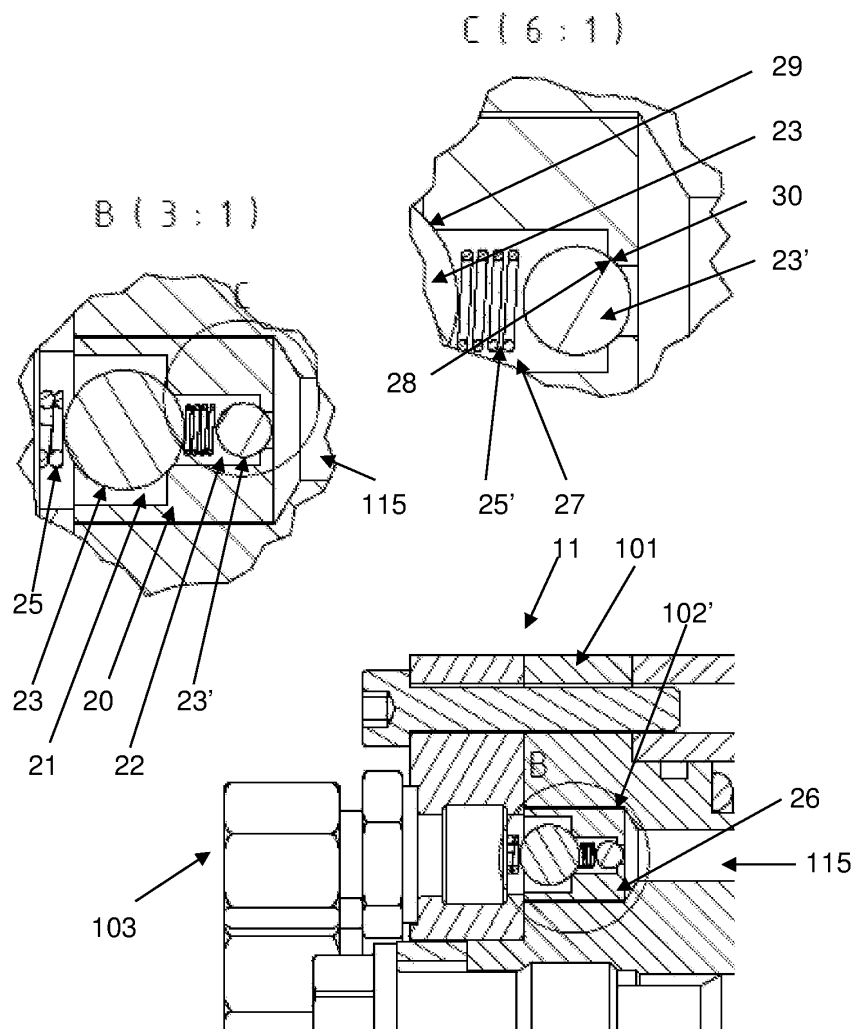


FIG. 9

10/11

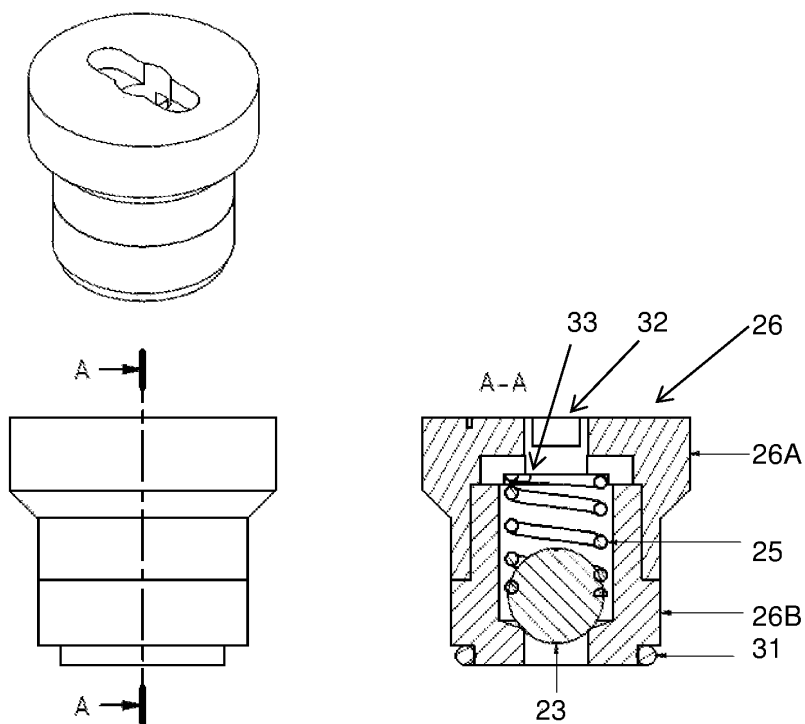


FIG. 10

11/11

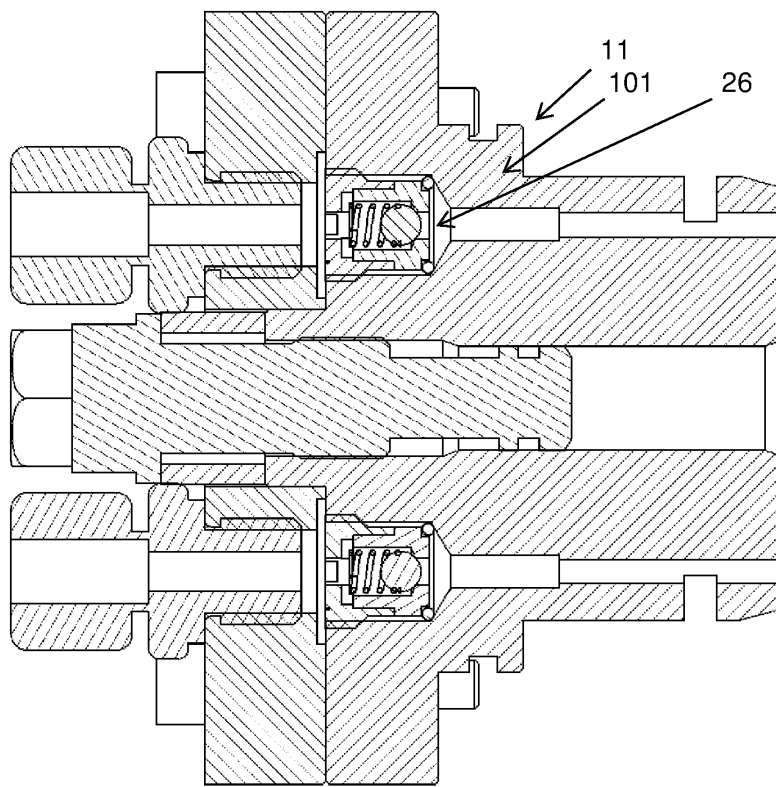


FIG. 11a

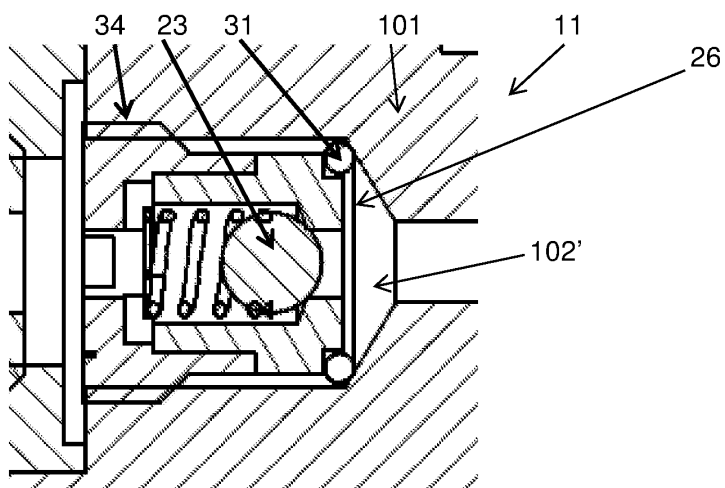


FIG. 11b