

(19)
(12)

(KR)
(B1)

(51) 。 Int. Cl. ⁷
F16L 21/08

(45)
(11)
(24)

2001 07 12
10 - 0294431
2001 04 17

(21)
(22)

10 - 1998 - 0036393
1998 09 04

(65)
(43)

2000 - 0018691
2000 04 06

(73)

148

310 605

(72)

148

310 605

(74)

:

(54)

,

,

(1a) (1b)가 (1) (1b)

(2) , (3) (4)

(3) (2) 가 ,

(3) 가 (3a) (3b) , (3a)

,

(3) 가 (3a) (3a') 가 , (3)

.

2 - .

3 - .

4 - .

5 - .

6 - .

$$[\quad]$$

1 - 1a - 1b -

2 - 3 - 3a -

3b - 3a' - 4 -

4a - 가

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, ,

,

_____ (97 - 18503) _____ .

가 , 가

가 .

가, 가

(延性)

가	가
가	

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[illegible]

(57)

1.

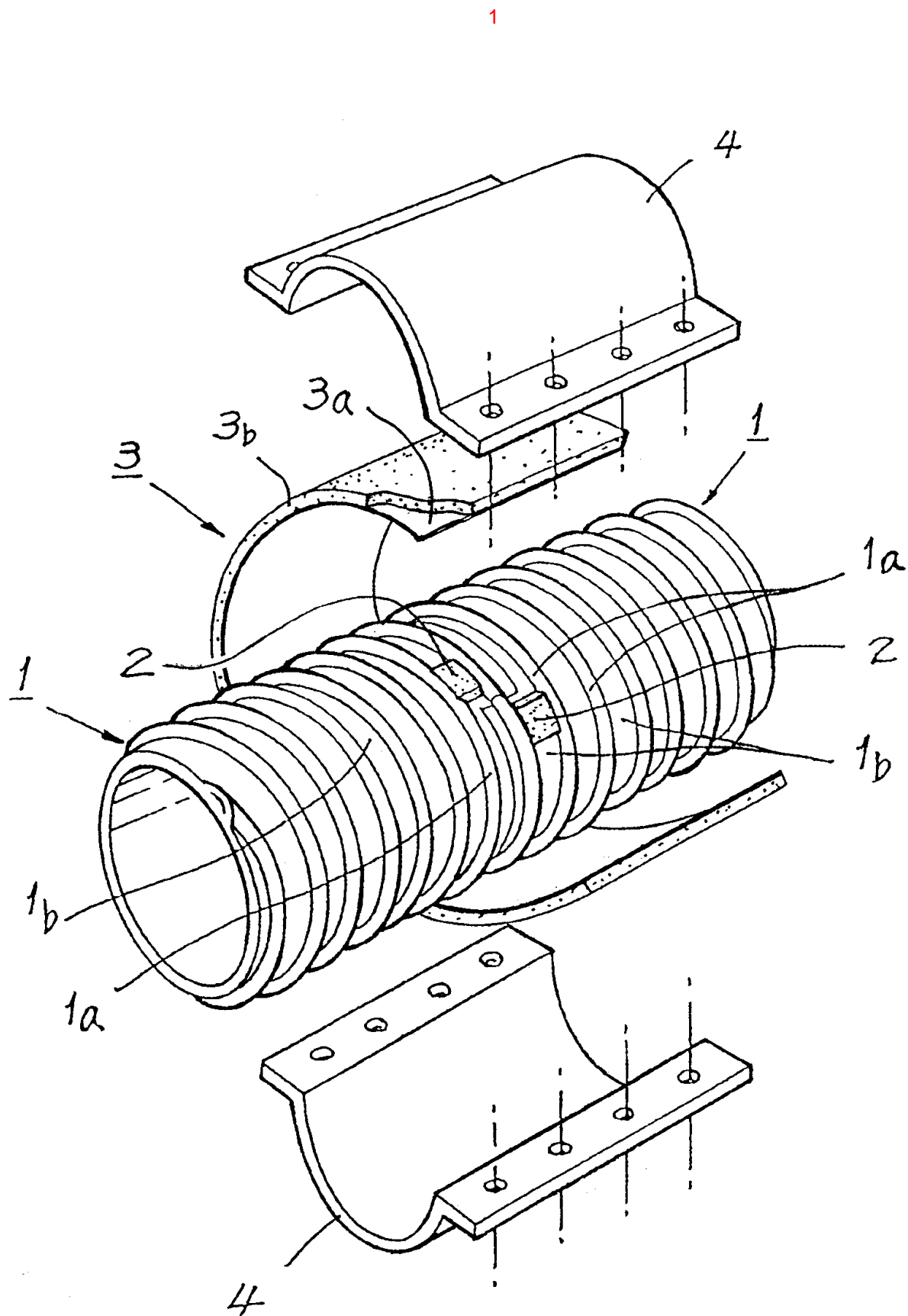
(3) 가 (3a) (3b)

2.

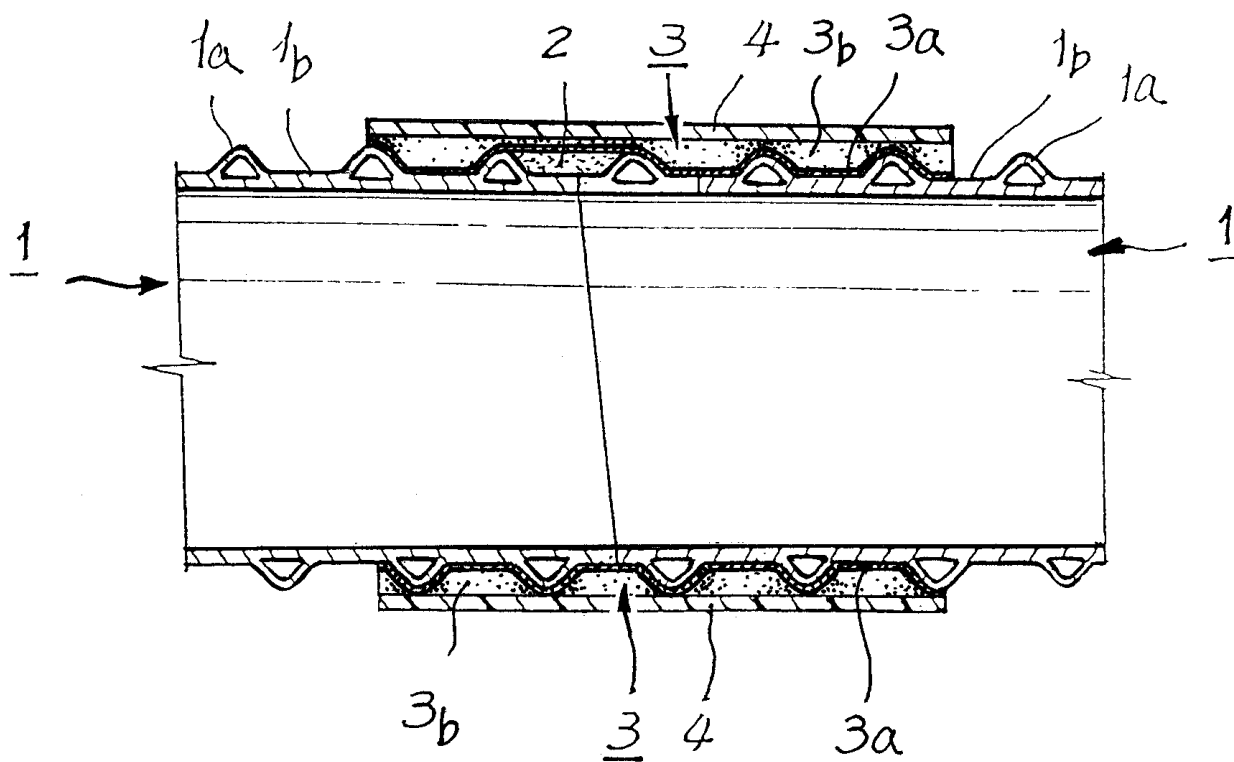
(3) 가 (3a) (3a')가

3.

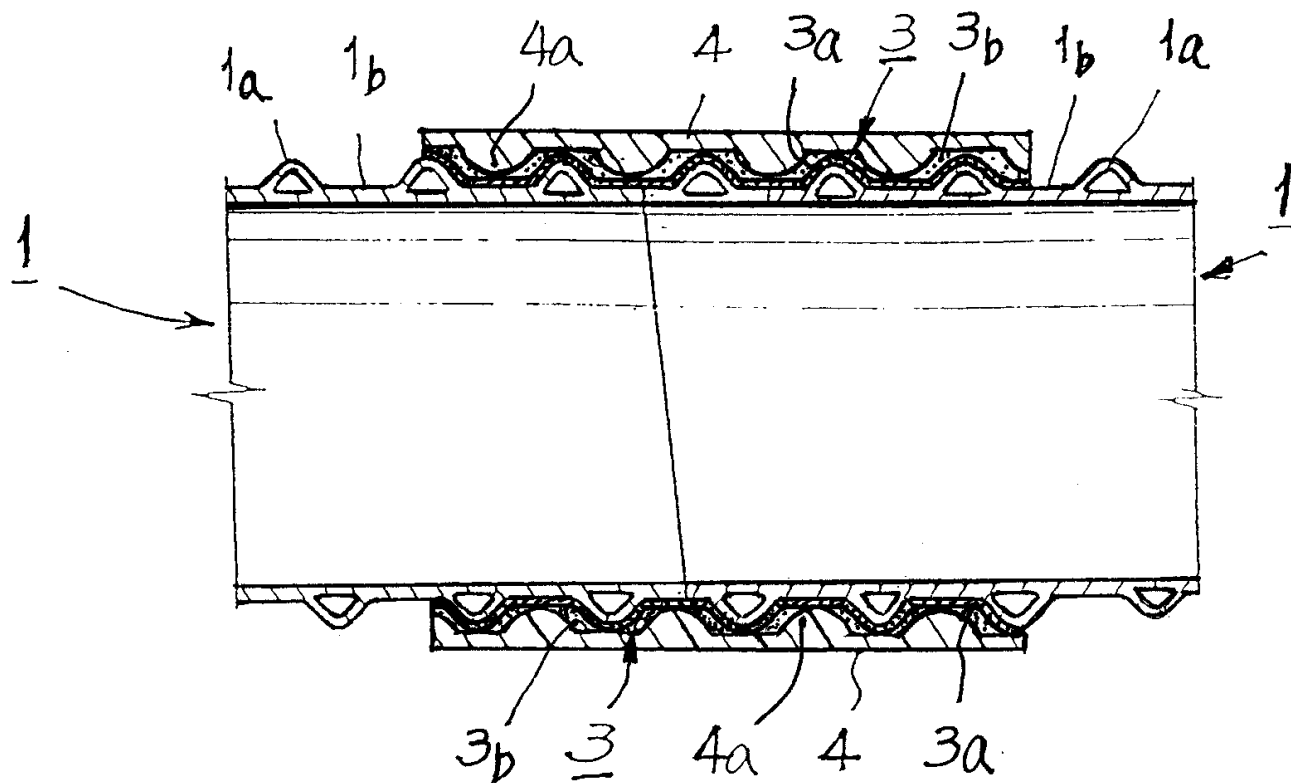
2 , (3) 가 (3a) (3a')가



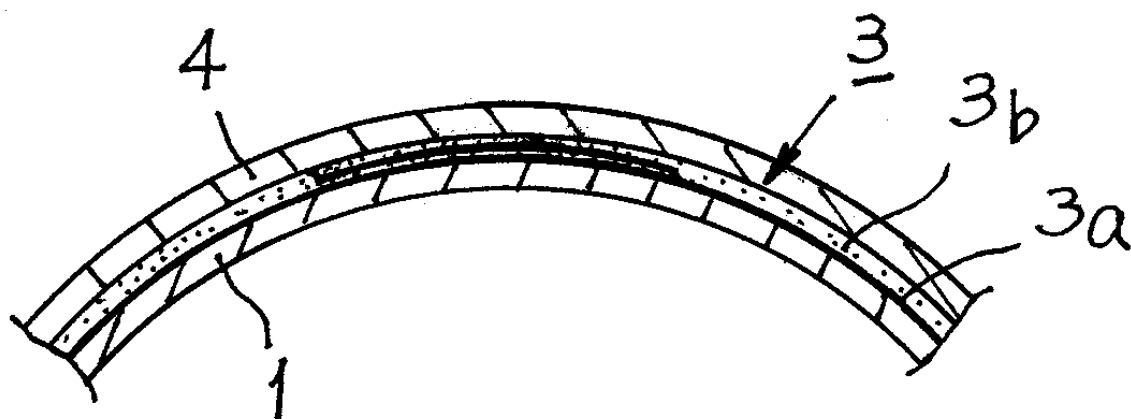
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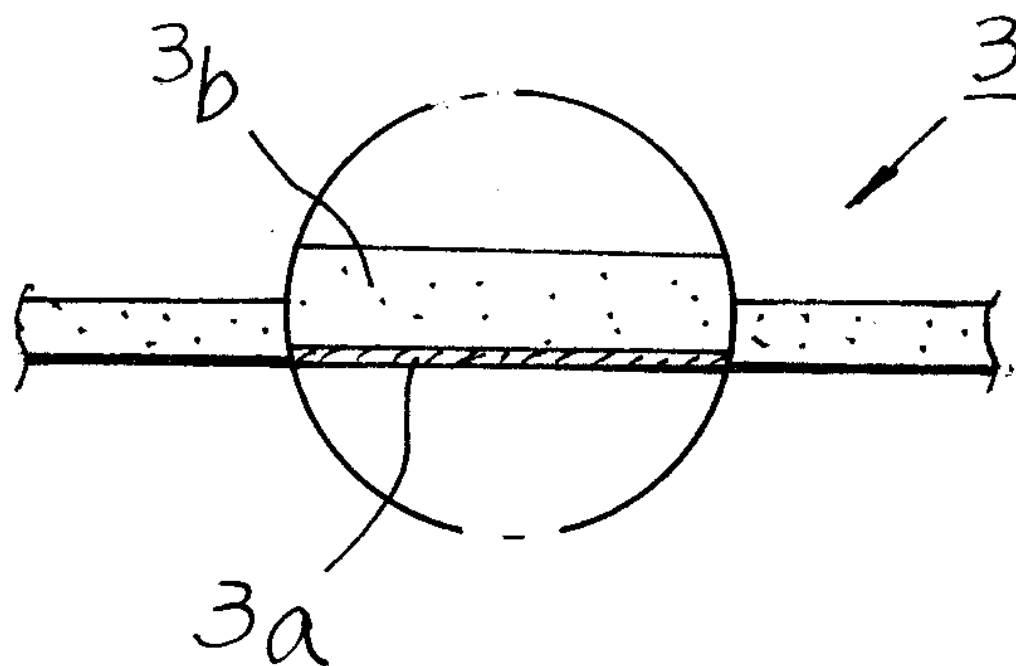
3



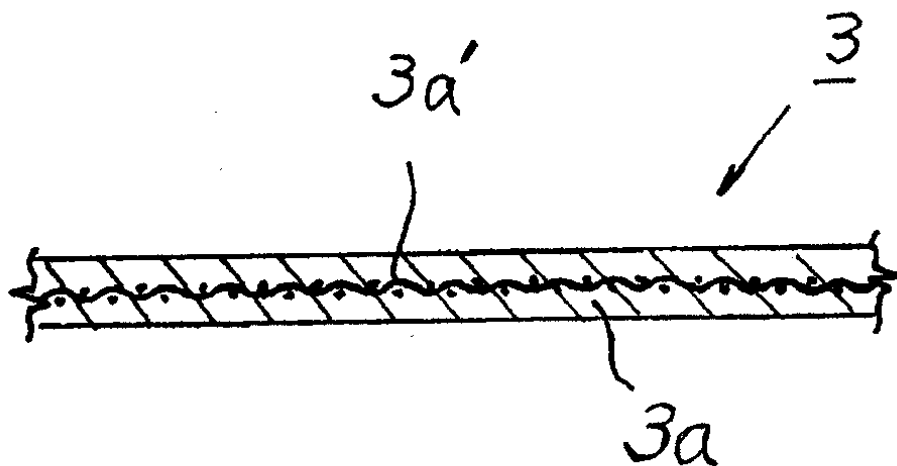
4



5



6



7

