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2002 09 13

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(73) 가 가  
- 1- 1-1

(72) 336 가 가

336 가 가

(74)

:

(54)

(2c) , ( ) 가 (1) (2) (2b) , 가 (2d) ,

2

1 1 , ,  
2 , ,  
3 2 , ,  
4 3 , ,

5  
6  
7  
8  
9

4  
5  
6  
7

,

,

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,

\*

1: 2: ( )

2c: , a, b: ( )

2b: : ( )

2d: : ( )

(hub) (周面)

가

가

가

2A)( 1 9 )가 (1) ( )

(2A) (1) (a) (c) (b)

(c) (d) (b)가

(c)가

(b) (b1) (a)

(c) (b) (c1) (b1) (剛性) (c) (c1)

(b) (b1) 가 (正壓面) 가 (負壓面)

가 가

가 (cost) (energy - saving)

가

2

0

PG1 PG2가 P S Q OS OQ OS가 O t PG1, PG2 ,

PG1 PG2가 k 2 OS G1, G2 t 0.7 0.8 가

T J1 T, U TJ1 TJ2가 OS가 t , U m , U m+ n

J2 J1 1.3 1.5 UJ2 가 U J3 UJ3 n

가 V

가

QY S Y S SY Q QY SY Y 가

Hf QY Hk가 10 20% 가

가 L1 L2가 L2 가

1 2 1

(1) ( 3 ) (2)가

(2) (1) (2c) (2a) (2b) (2c) (2b)

(2d) (2) (2b) (2a) (2b)가

(2c)가 가 (2c) (2c) (2d)가

(2c) (2c) 가 (2) 가

3 Q S OQ OS O O (2c) (2b) (2d) (2d)

PG1, PG2 PG1 PG2가 P OQ OS가 t

가 k 2 G1, G2 t 0.7 0.8

4 (2c) 가 가 3 가 2

O , (2c) (2d) Q OQ ,  
O , (2b) (2d) S OS ,  
OQ OS가 t .  
J1, J2, J3 , m+ n t (2d) T, U  
n TJ1 TJ2가 m UJ2 UJ3가  
1.3 1.5 가 .  
5 , 4 .  
(2c) 가 , (2d) (2d)  
) S Q Y QY S Y  
SY SY Hf QY (2c) a  
Hk가 10 20% 가  
가 .  
6 , 5 .  
2 (2c) 1  
2, 3가 L1 , 3 L2 , L1 L2가  
2  
가 가 .  
7 , 6 .  
(1) ( 1 ) (2)  
(2) (2b) , (2c) ,  
(2d) , a,  
(2c) a 가 .  
가 V  
8 (1) ( 1 ) (2)  
(2) (2b) , (2c) ,  
(2d) , b,  
(2c) b 가 .  
가 가 .  
가 , 가 ,  
가

(57)

- 1.
- 2.
- 3.
- 4.

가

O,

P S Q OS OQ , OS가 O, t , PG1, PG2 , 가  
 PG1 2 PG2가 G1,G2 k t 0.7 0.8 , 가  
 5.

3 S Q OS OQ , OS가 O, O, t , T, U , J1, J2, J  
 2 , OQ OS가 m , t U T J1 J2 TJ1 , U T J3  
 UJ3가 TJ2가 n m+ n J2 1.3 1.5 UJ2 가 U J3

6.

7.

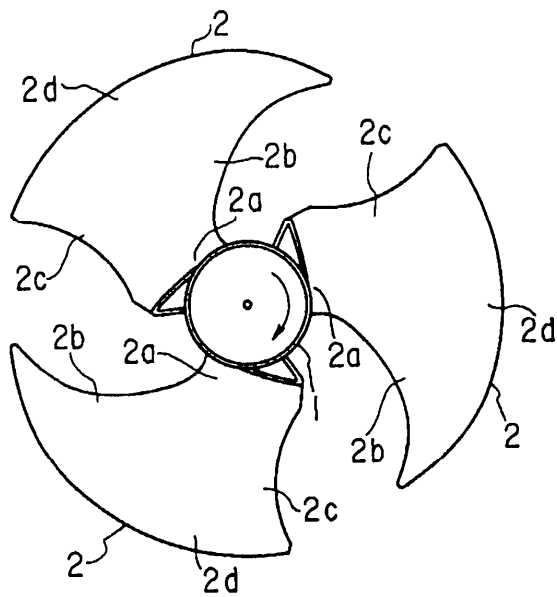
8.

9.

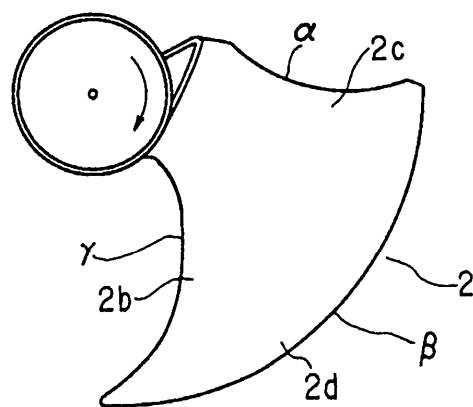
QY Y SY , Q QY , S  
 Hk가 10 SY 20% 가 Hf QY .  
 10.

L1 , 2 L2 , L1 L2가

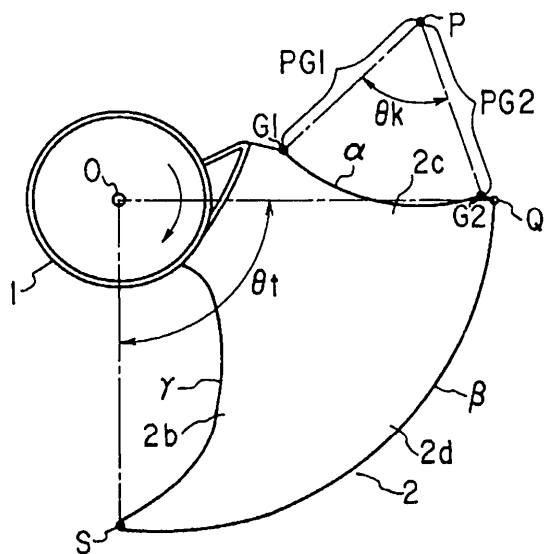
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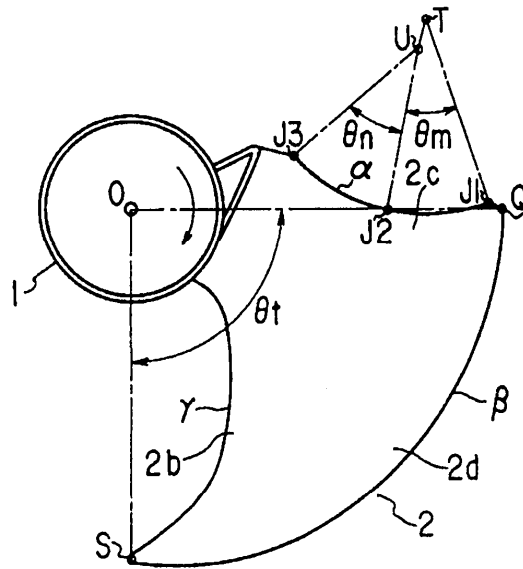
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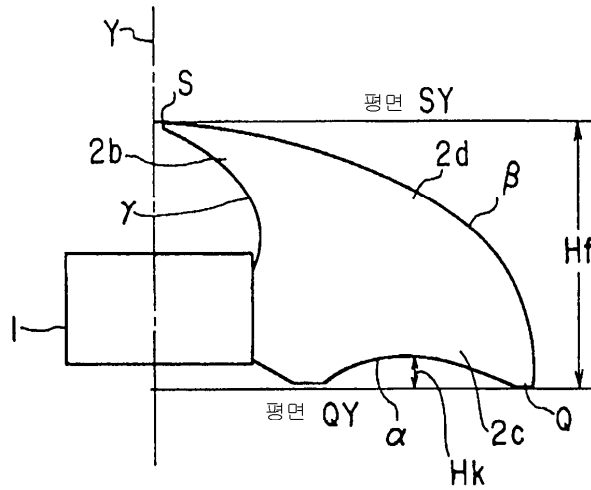
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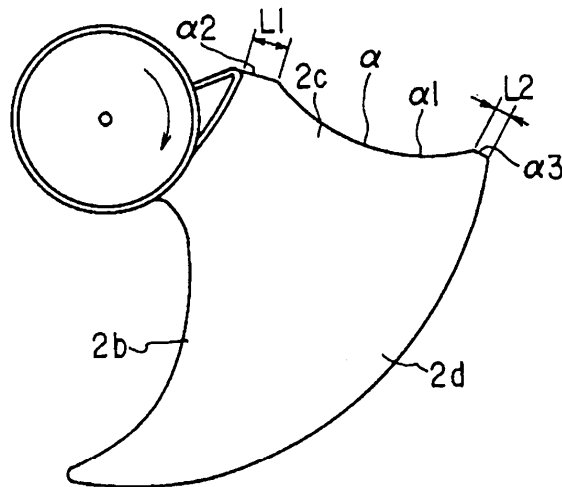
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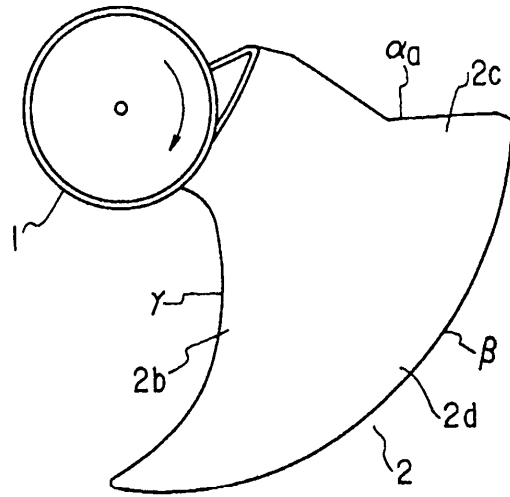
5



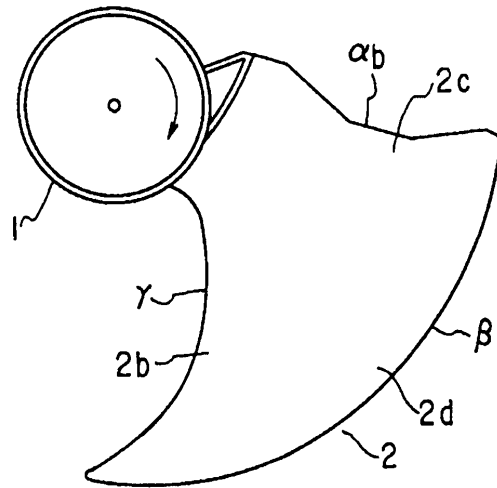
6



7



8



9

