

1.

1990

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가

,

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가

. 1999

20

ITMA

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가가

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.

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OE

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130,000rpm,

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가

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가

.

가

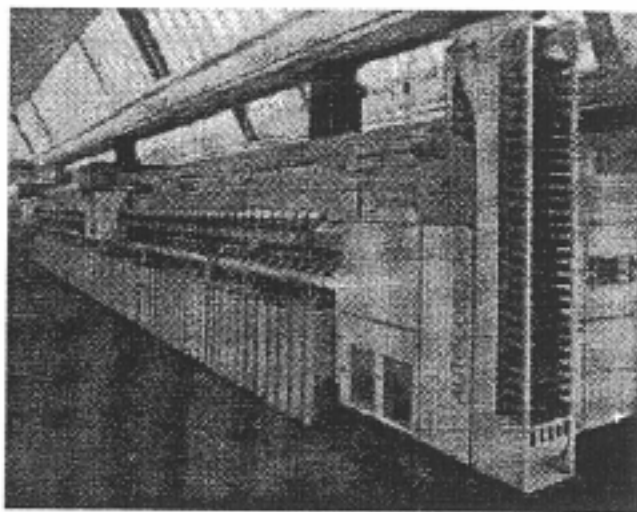
. 1997 OTEMAS

ITMA

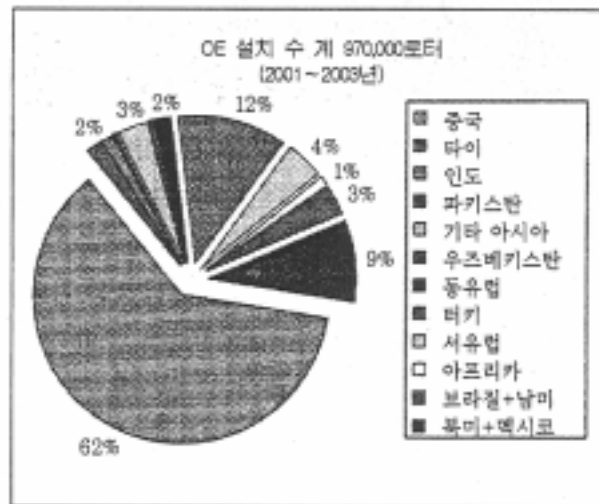
.



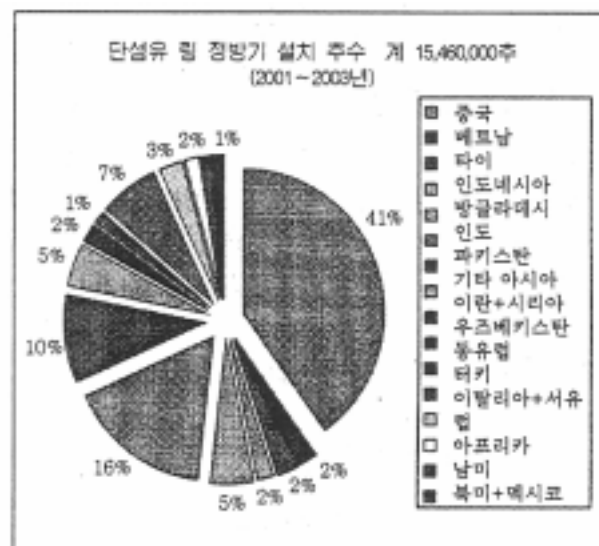
40% . 5%  
 . 가 OE 가  
 . 가 가  
 .  
 , 360 OE 150,000rpm 가  
 300m/min .  
 5kg .  
 Ne 4 ~ 40 가 50%  
 Ne 13 ~ Ne 24 . Ne 30 가 5% .  
 가 가 ,  
 90% .  
 100% / 85% .  
 OE , ,  
 .



< 1> OE (Autocoro 360)



< 2> OE



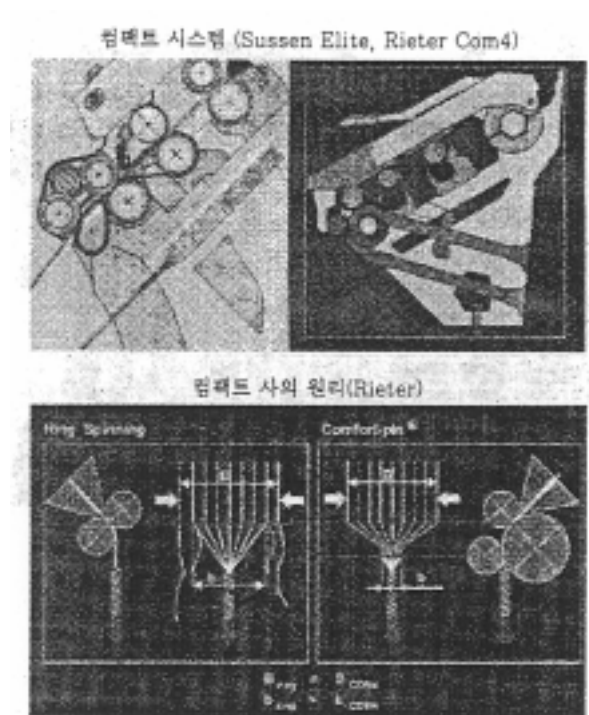
< 3>

### 3. (Compact Spinning)

가

. < 4> Rieter Sussen

IPI가 가, 가, 가, 가, 가



< 4>

#### 4. (Vortex Spinning)

1980 MJS(Murata Jet Spinner)

, ,

15                    20%                    .                    3,000 가

100%                    /                    .

가가

/

가 .

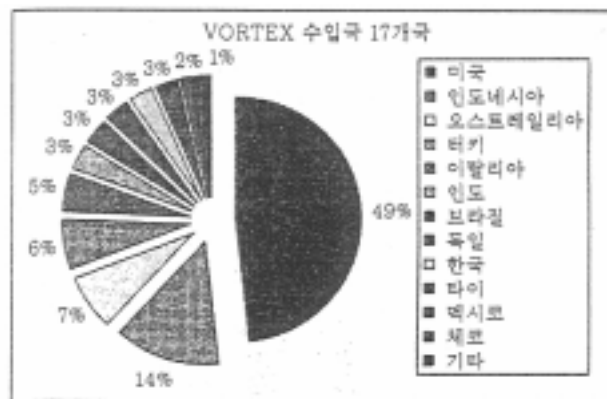
OE                    가 .

MJS .

가

100%

1980 .



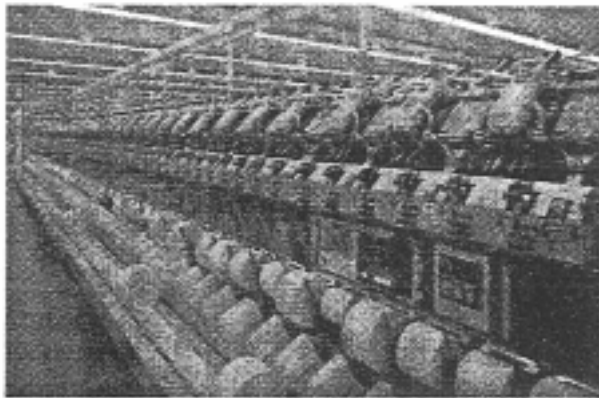
< 5> Vortex

MVS(Murata Vortex Spinner)

가 . 1997

OTEMAS 1996

. 1999 ITMA  
 2001 OTEMAS .  
 600 가 50%, , , ,  
 , , , , , 17 가 .  
 2004 Vortex 861  
 , , , VOS , .



< 6> MVS(Murata Vortex Spinner)

5.

MJS

< 7>. MJS 2

가 (假撚)

가

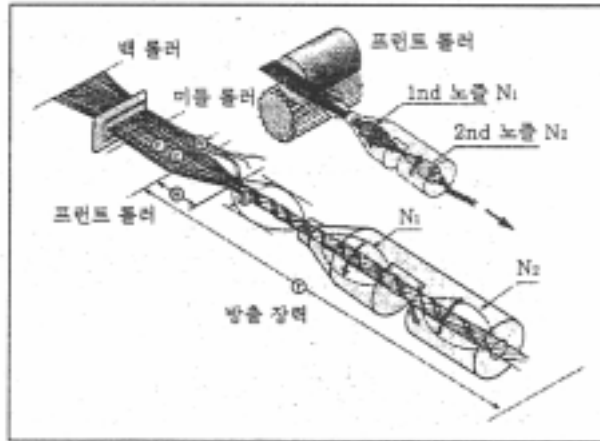
S, Z

2

가

,

.



< 7> MJS

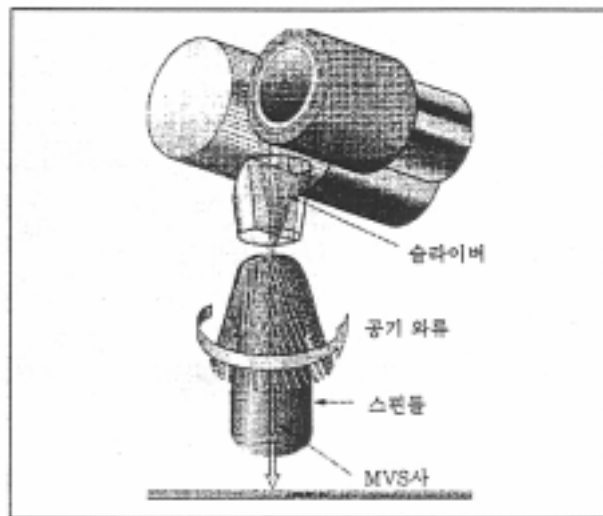
< 8, 9>

가

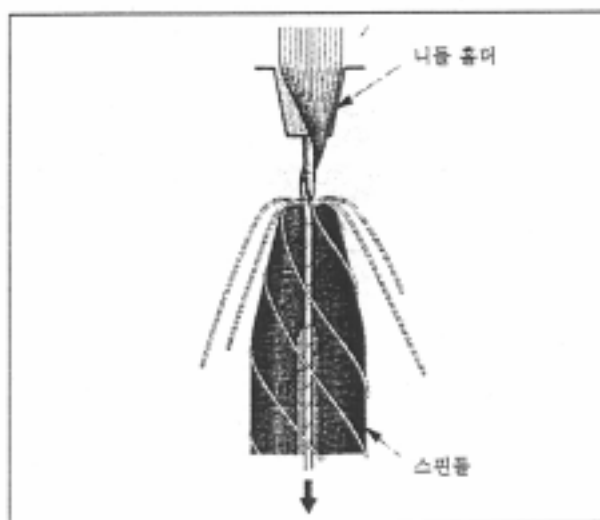
가

가

가



< 8>

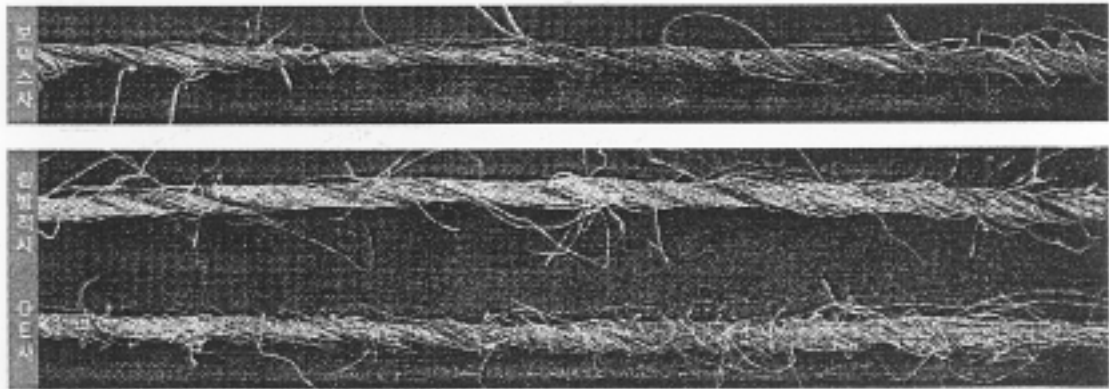


< 9>

가 . 가 .

< 10> .

평 방적사와 같은 꼬임 구조  
확대 사진으로부터 알 수 있듯이 평 방적사와 아주 유사한 꼬임 구조를 가지고 있다.



< 10>



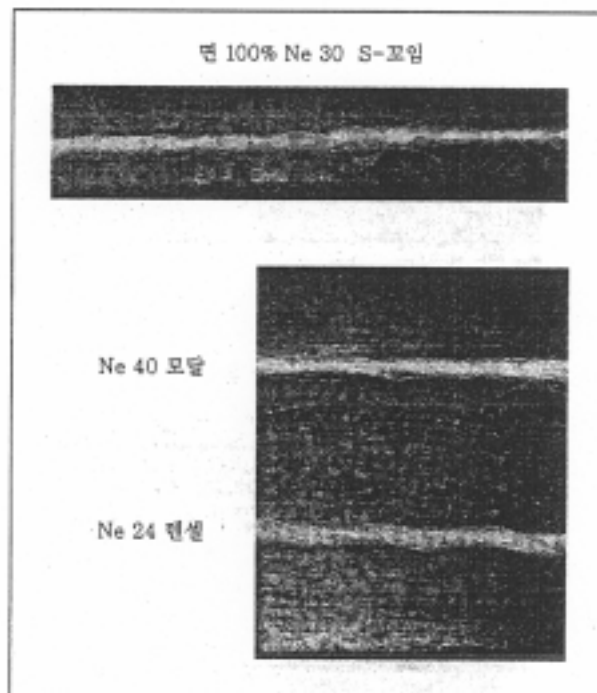
< 11>

OE

가

가

< 11>



< 12> Vortex

가

MJS

100%

. < 12> 100%

가

100%

MJS

SZ

MJS

가

가

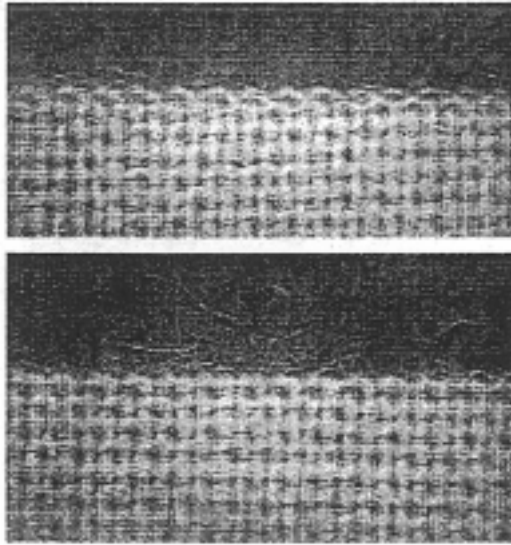


< 13> Vortex

6.

가

가



< 14> Vortex ( ) ( )

< 14> 100% . Ne 38/1

.

<

15>. 3mm

.

가

가

.

가

(Air Singed Yarn)

.

< 14>

.

, 12mm

.

가

가

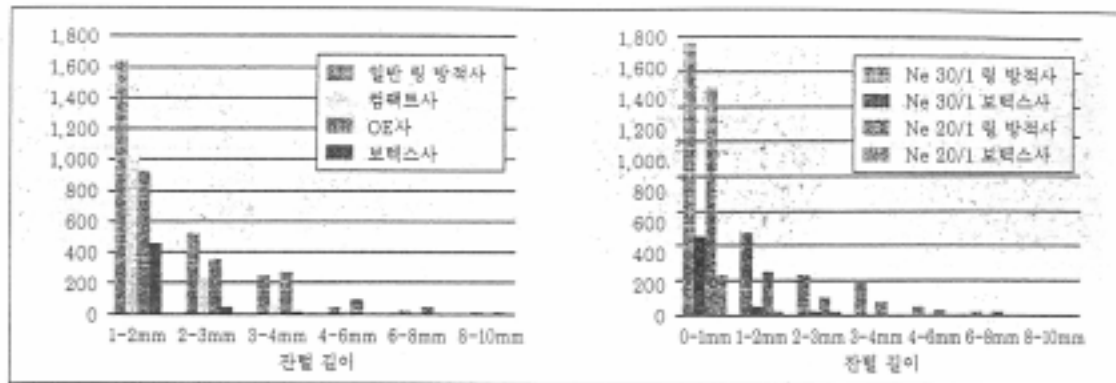
,

(Air Combed Yarn)

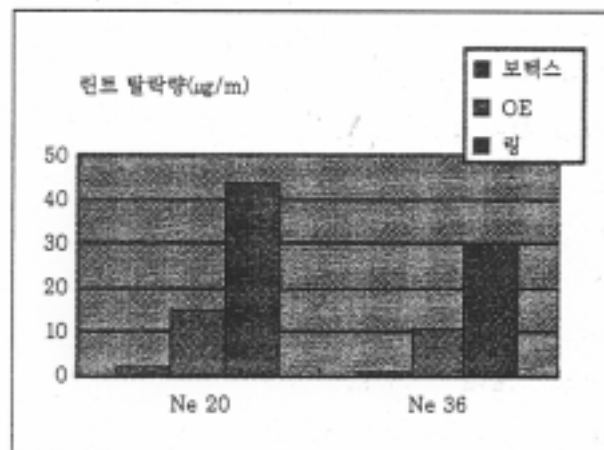
1

가

< 16>



< 15>



< 16>

Lawson-Hemphill 150m/min

가

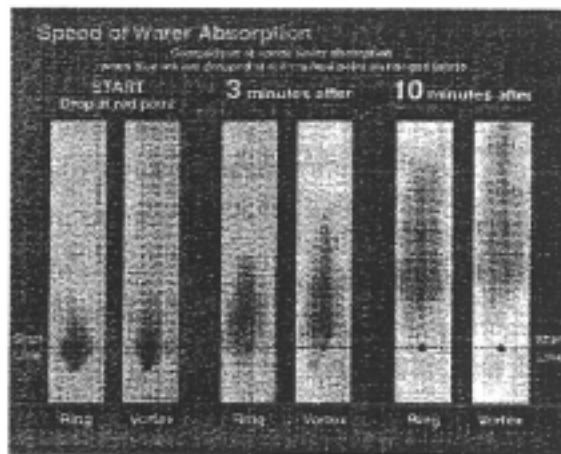
,

가

가

가 가

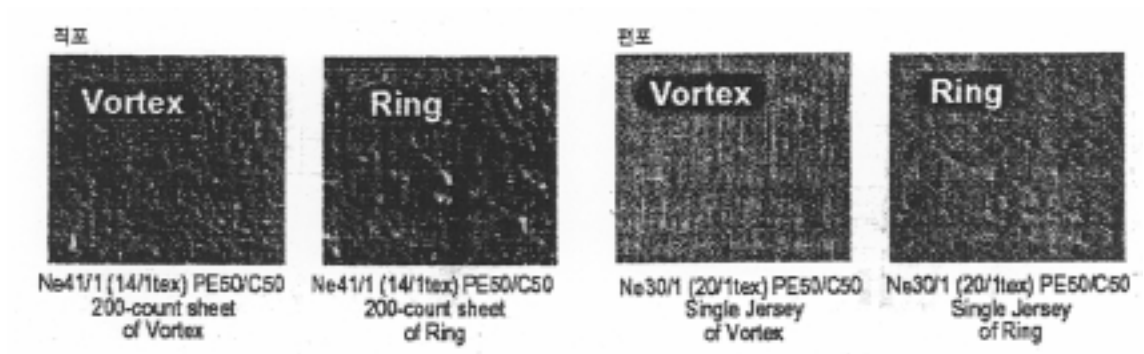
가 . < 17>



< 17>

가

. < 18> /



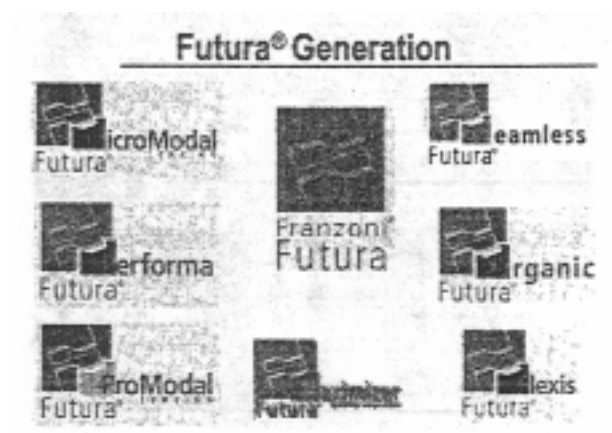
< 18> ICI

50% / 50%

7.

가

가



< 19> Futura Generation

가

가

Franzoni Filati Futura

1999

가

Futura Generations

가

가