

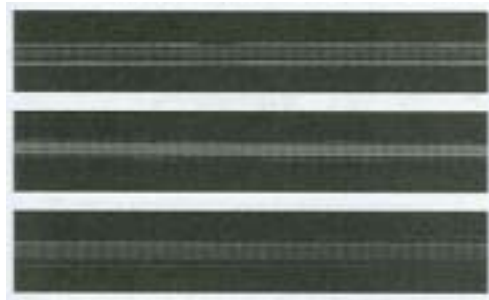
, Morphotex

1.

，
“Morphotex”
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2.

. < 1> Morphotex .



< 1> Morphotex (, ,)

2.1

1990 가
，
가 ， 1995 (帝人)

, 3 가 .
 , 2 . ,
 .
 2001 3
 . 2002
 , 2003 7
 .

2.2

(mandolin)

,

(鱗粉)

3 가

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Morphotex

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2>.

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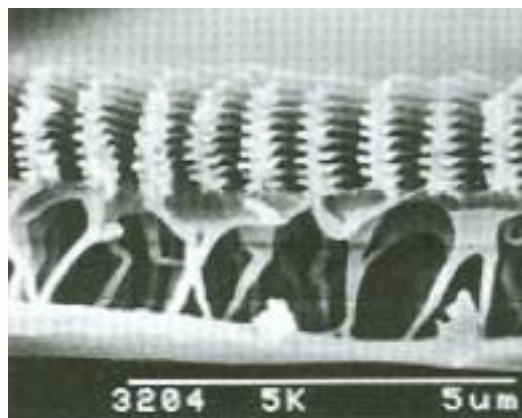


< 2> Morpho Diduus

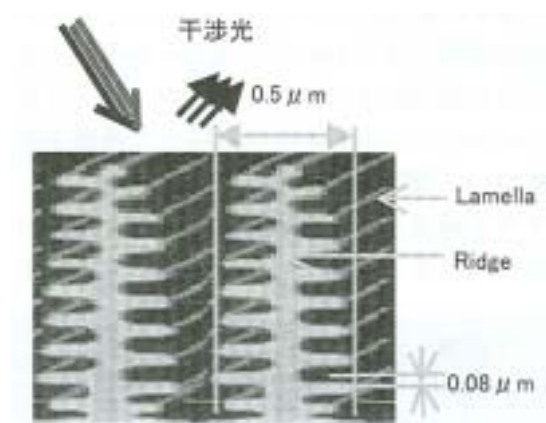
< 3> $50\ \mu\text{m} \times 100\ \mu\text{m}$
 . < 4>
 SEM , 가
 . < 5>
 < 1>.



< 3>



< 4> SEM



< 5>

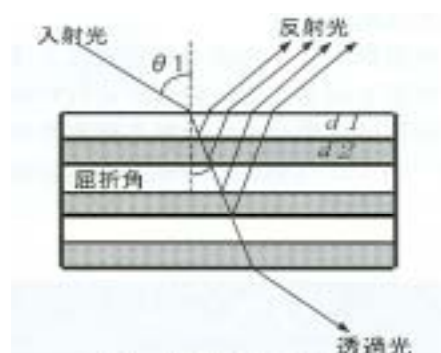
< 1>

(μm)	1.5 6 0.08	1.0 7 0.14

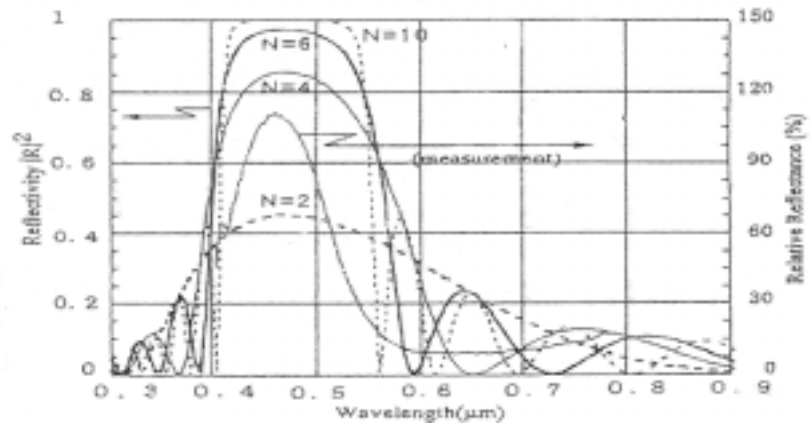
2.3

< 6>

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< 6>



< 7>

< >

$$\lambda = 2(n_1 d_1 \cos \theta_1 + n_2 d_2 \cos \theta_2)$$

< >

$$R = (n_1^2 - n_2^2) / (n_1^2 + n_2^2)$$

< >

$$n_1 d_1 = n_2 d_2 = \lambda / 4$$

n: , d: , θ_1 : , θ_2 :

< 7>

< 1> , (N) . ,

0°, 0°

, 가

3. , Morphotex

3.1

가 .

가 0.5 ,

가 .

< 2> , Morphotex

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< 2>

< >

		Tm()
PEN	1.63	270
PC	1.59	280
PSt	1.59	240
PET	1.58	260

< >

		Tm()
Ny	1.53	260
PMMA	1.49	180

, ,

PET(

), Ny() .

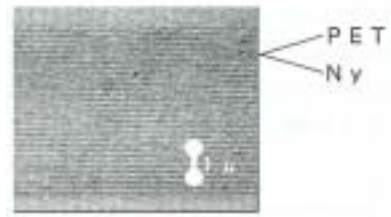
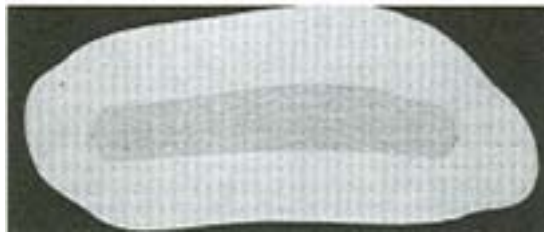
3.2

가

< 8>.

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< 3>.



< > < >
 < 8> Morphotex SEM

< 3> Morphotex ()

		*($\theta = 0^\circ$)
	480nm 520nm 630nm	76nm 83nm 101nm

3.3 Morphotex

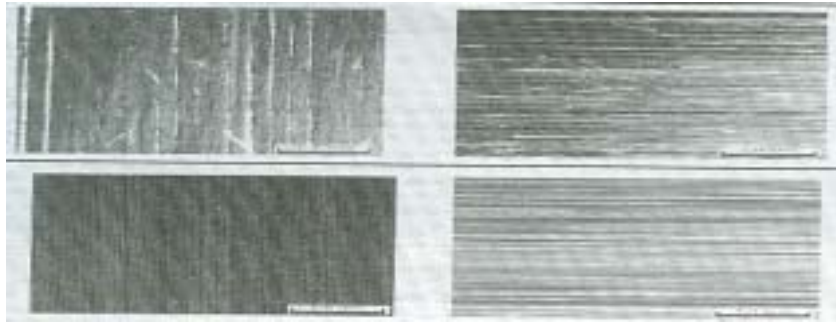
Morphotex

가 , 가
 . < 9> 40 °
 40 °
 , Morphotex

3.4 Morphotex

Morphotex

120dtex/12fil , , , ,
 80dtex/20fil , 가
 < 4>.



< 9> Morphotex (: , : Morphotex)

< 4> Morphotex

	nm	/ dtex/f	/ cN/dtex / %	% (150)
	430	120/12	3.2/35	3
	480	120/12, 80/20	3.4/40	3
	520	120/12, 80/20	3.5/45	3
	630	120/12, 80/20	3.5/50	3

Morphotex 가

. 가

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가 가

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3.5

Morphotex 2003 7 .

Morphotone

< 11>



< 10> 文化女子大學



< 11> 輪島塗

4.

Morphotex

8

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