

FIG. 1

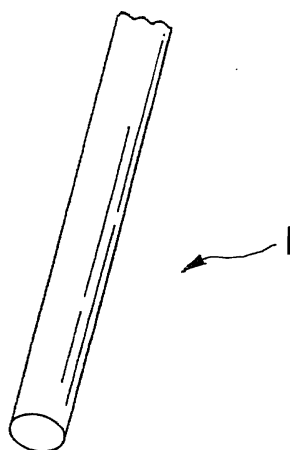


FIG. 2

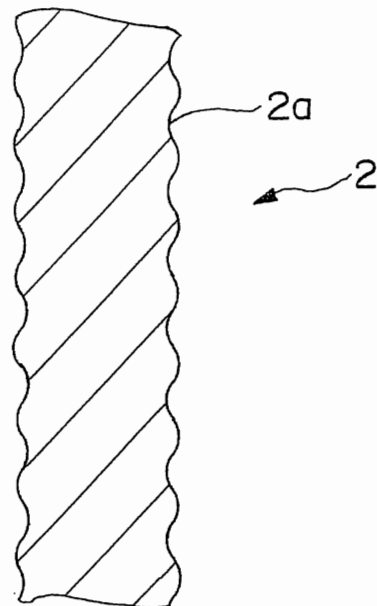
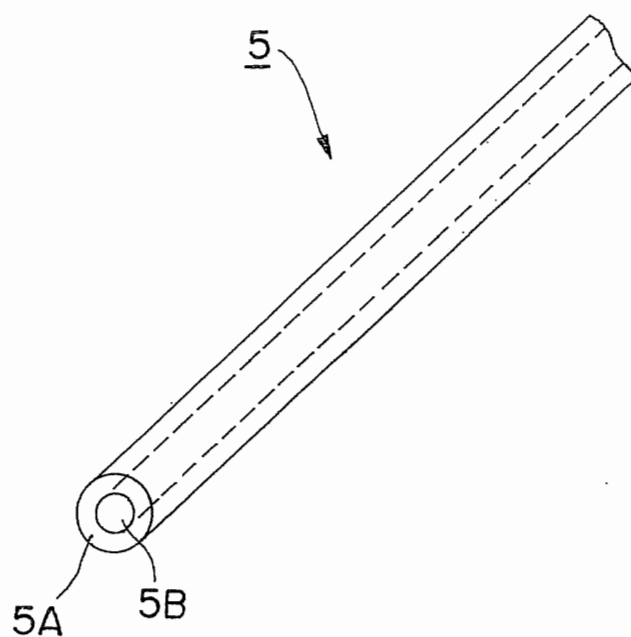


FIG. 3

(A)



(B)

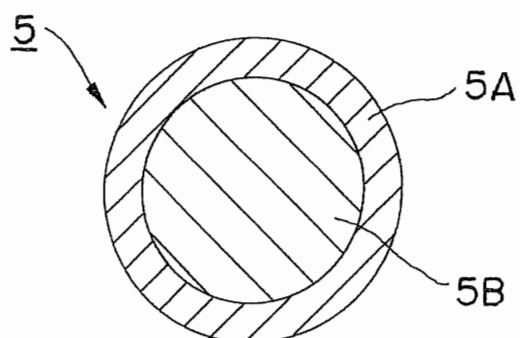


FIG. 4

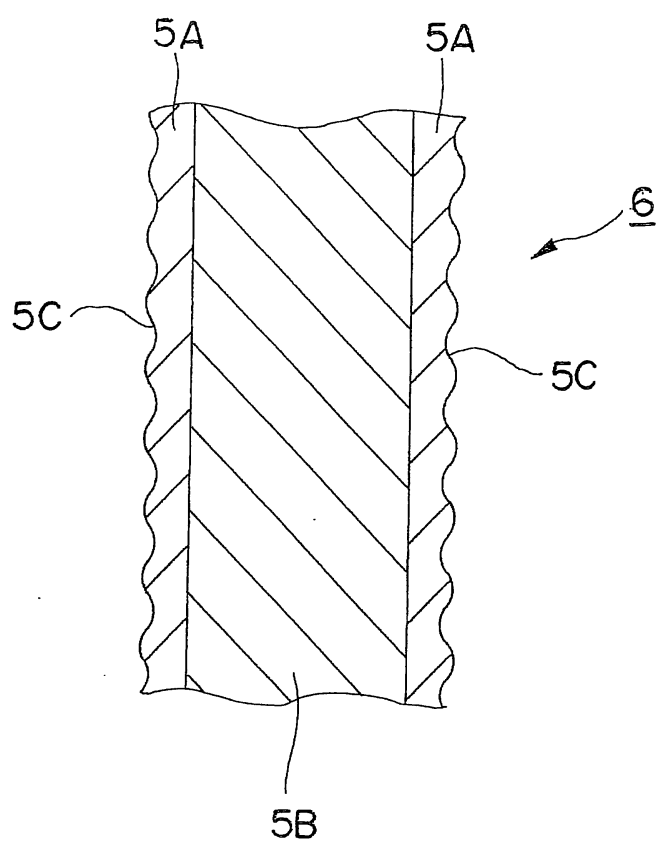


FIG. 5

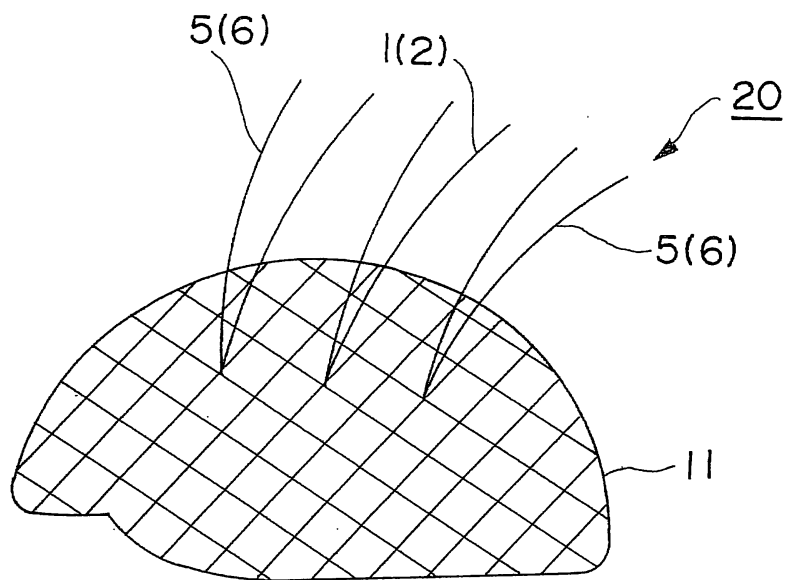


FIG. 6

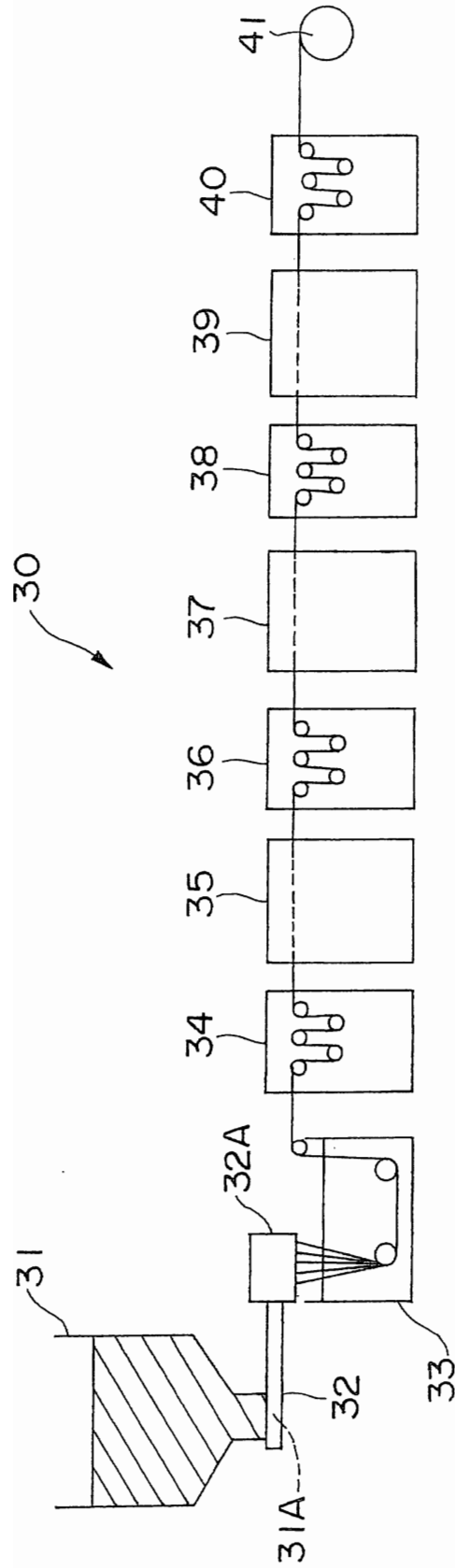


FIG. 7

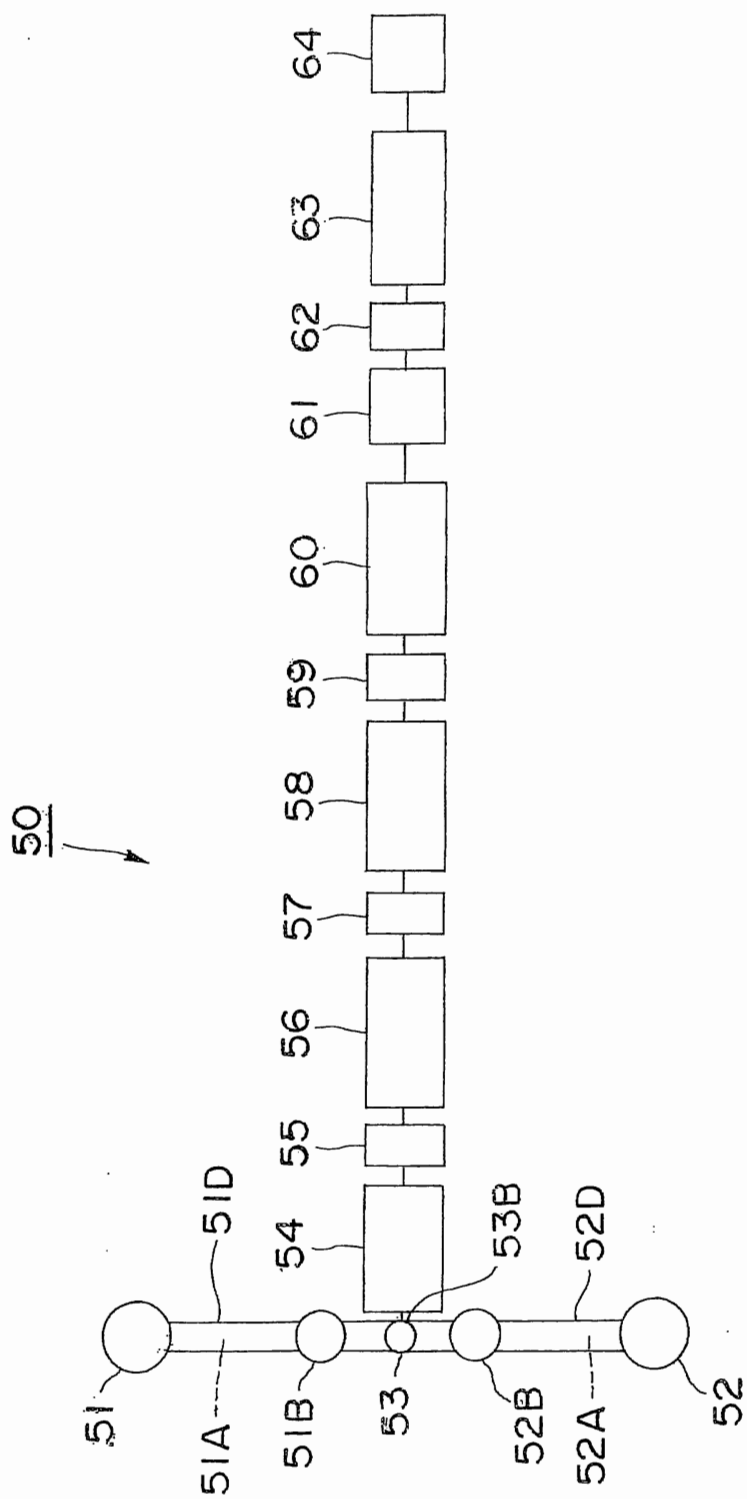


FIG. 8

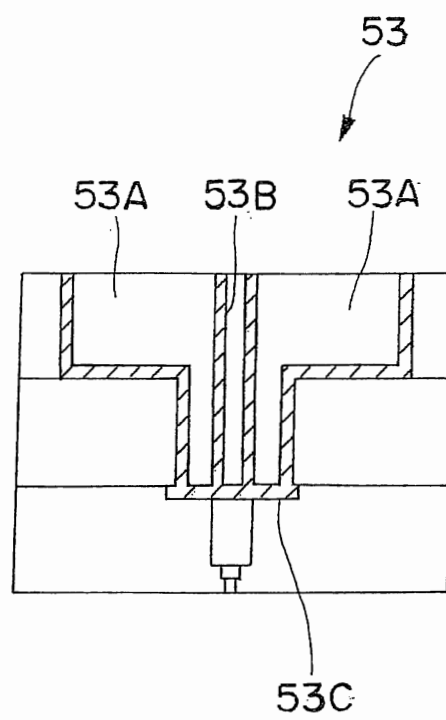


FIG. 9

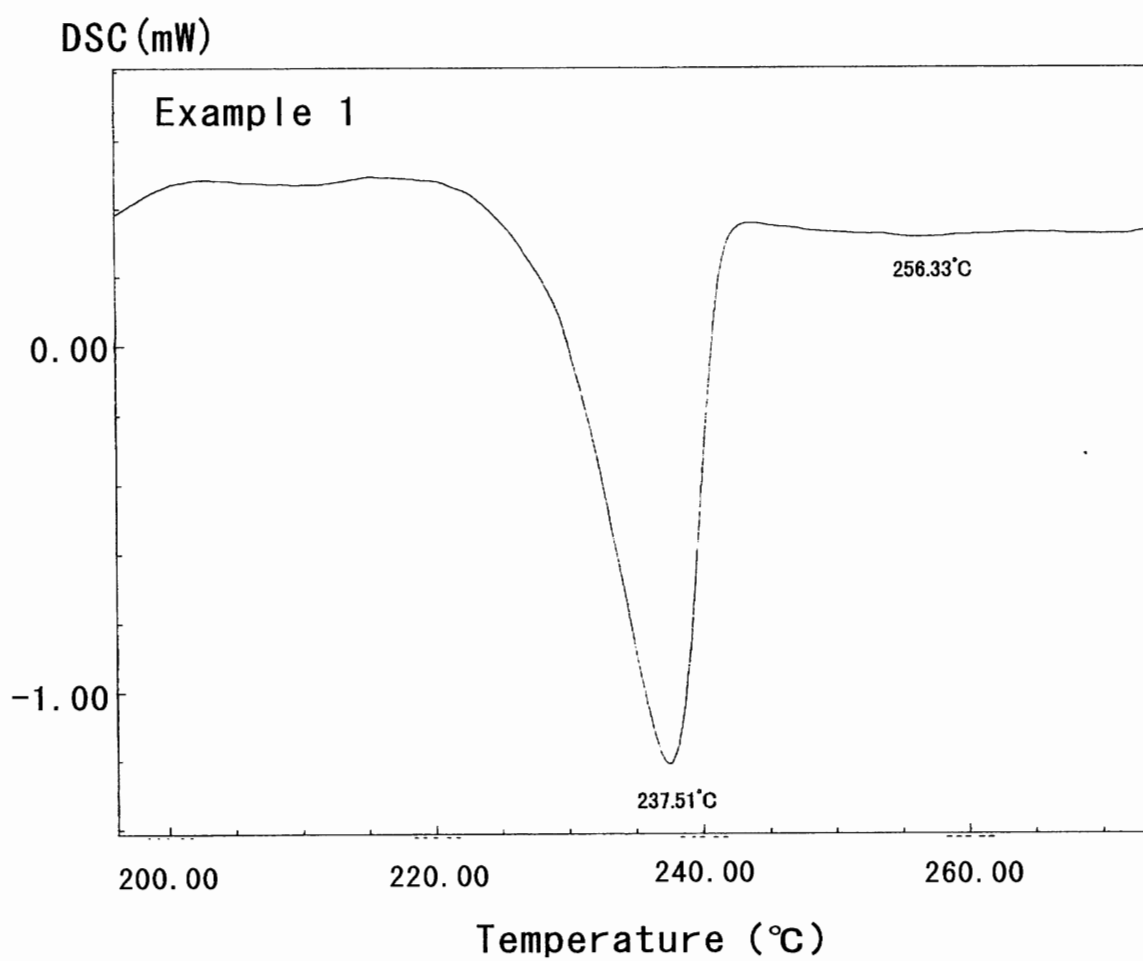


FIG. 10

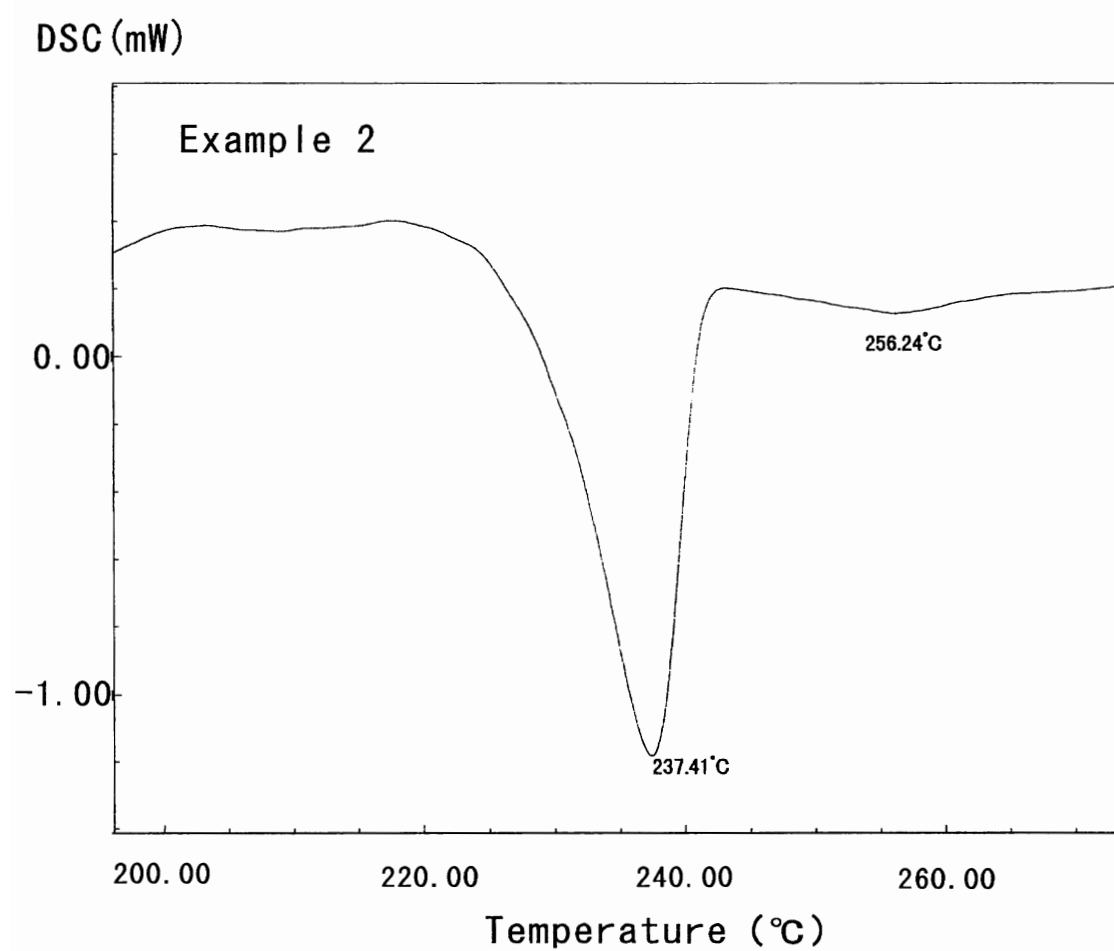


FIG. 11

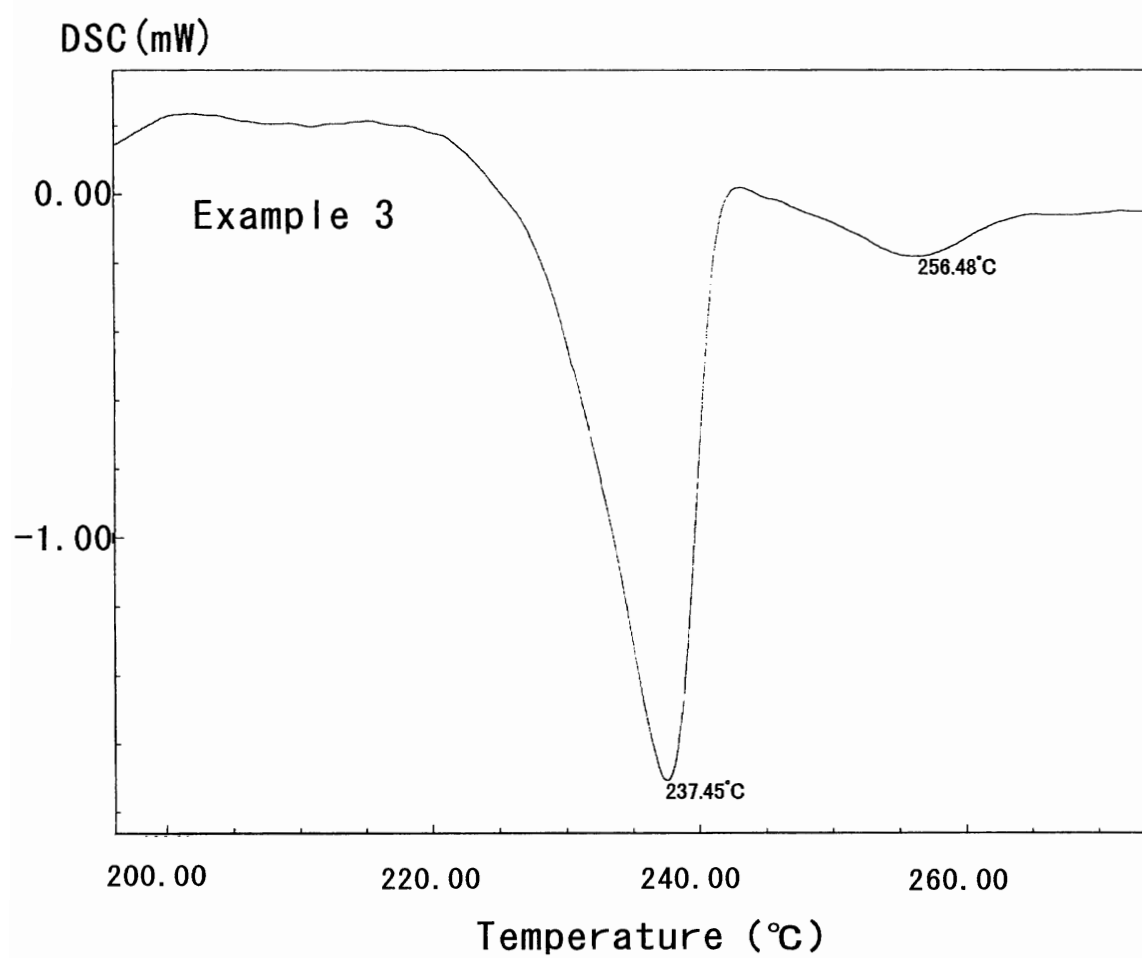


FIG. 12

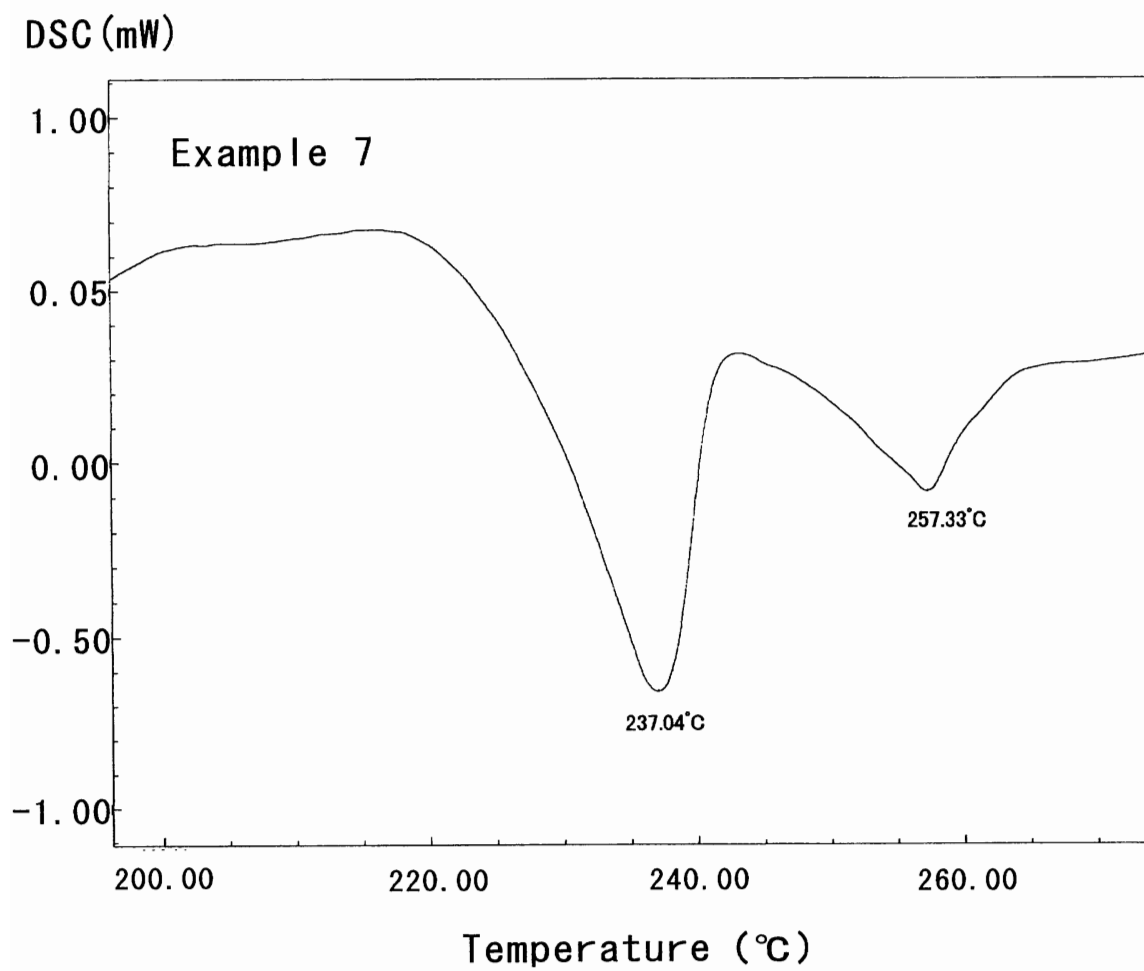


FIG. 13

(A) Ex.:Example C.Ex.: Comparative Example												
	Composition			Curl Diameter (mm)								
	MXD6 (%)	PET (%)	nylon6 (%)	Thermal Treatment 180°C 2hours	Thermal Treatment 170°C 1hour	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo	Steaming for Recovery			
	Ex.1	97	3	25	---	48	45	45	30			
	Ex.2	95	5			45	44	43	28			
	Ex.3	90	10			42	41	40	27			
	Ex.4	85	15			40	39	39	27			
	Ex.5	80	20			38	38	36	26			
	Ex.6	75	25			35	34	33	25			
	Ex.7	70	30			30	30	30	25			
	C.Ex.1	100	0	25	---	50	50	50	35			
	C.Ex.2	99	1			50	49	49	32			
	C.Ex.3	65	35			27	27	27	25			
	C.Ex.4	60	40			26	25	25	25			
	C.Ex.5	0	100			25	25	25	25			
		C.Ex.6	---			---	---	30	34	33	31	31

(B)				
	Deformation Ratio (%)			
	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo	
	Ex.1	192	94	94
	Ex.2	180	98	96
	Ex.3	168	98	95
	Ex.4	160	98	98
	Ex.5	152	100	95
	Ex.6	140	97	94
	Ex.7	120	100	100
	C.Ex.1	200	100	100
	C.Ex.2	200	98	98
	C.Ex.3	108	100	100
	C.Ex.4	104	96	96
	C.Ex.5	100	100	100
	C.Ex.6	113	97	91

(C)			
	Curl Diameter (mm)		Hair Drier Deformation Ratio (%)
	(Hair Drier 2 minutes)		
	Ex.1	55	220
	Ex.2	52	208
	Ex.3	50	200
	Ex.4	48	192
	Ex.5	46	184
	Ex.6	42	168
	Ex.7	35	140
	C.Ex.1	59	236
	C.Ex.2	58	232
	C.Ex.3	30	120
	C.Ex.4	28	112
	C.Ex.5	26	104
	C.Ex.6	35	117

FIG. 14

(A)		Ex.:Example C.Ex.: Comparative Example									
		Composition			Curl Diameter(mm)						
		MXD6 (%)	PET (%)	nylon6 (%)	Thermal Treatment 180°C 2hours	Thermal Treatment 170°C 1hour	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo	Steaming for Recovery	
	Ex.1	97	3	---	21	---	47	45	45	24	
	Ex.2	95	5		21		43	42	41	23	
	Ex.3	90	10		21		41	39	38	22	
	Ex.4	85	15		21		39	35	35	22	
	Ex.5	80	20		21		33	33	33	21	
	Ex.6	75	25		21		31	29	28	21	
	Ex.7	70	30		21		29	29	28	21	
	C.Ex.1	100	0	---	21	---	50	49	49	29	
	C.Ex.2	99	1		21		49	49	48	28	
	C.Ex.3	65	35		21		25	25	24	21	
	C.Ex.4	60	40		21		23	23	23	21	
	C.Ex.5	0	100		---		21	22	21	21	
	C.Ex.6	---	---		100		---	26	29	28	26

(B)		(C)									
		Deformation Ratio (%)			Curl Diameter (mm)		Hair Drier Deformation Ratio (%)				
		Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo	(mm)	(Hair Drier 2 minutes)					
	Ex.1	224	96	96	Ex.1	54	257				
	Ex.2	205	98	95	Ex.2	52	248				
	Ex.3	195	95	93	Ex.3	49	233				
	Ex.4	186	90	90	Ex.4	47	224				
	Ex.5	157	100	100	Ex.5	46	219				
	Ex.6	148	94	90	Ex.6	40	190				
	Ex.7	138	100	97	Ex.7	34	162				
	C.Ex.1	238	98	98	C.Ex.1	59	281				
	C.Ex.2	233	100	98	C.Ex.2	57	271				
	C.Ex.3	119	100	96	C.Ex.3	30	143				
	C.Ex.4	110	100	100	C.Ex.4	27	129				
	C.Ex.5	105	95	95	C.Ex.5	23	105				
	C.Ex.6	112	97	90	C.Ex.6	32	112				

FIG. 15

(A)	Ex.:Example C.Ex.: Comparative Example								
	Composition			Curl Diameter(mm)					
	MXD6 (%)	PET (%)	nylon6 (%)	Thermal Treatment 180°C 2hours	Thermal Treatment 170°C 1hour	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo	Steaming for Recovery
Ex.1	97	3	---	35	---	57	57	56	37
Ex.2	95	5		35		55	54	37	
Ex.3	90	10		35		54	53	36	
Ex.4	85	15		35		50	50	36	
Ex.5	80	20		34		47	46	35	
Ex.6	75	25		34		44	45	36	
Ex.7	70	30		34		43	44	35	
C.Ex.1	100	0	---	35	---	60	58	58	44
C.Ex.2	99	1		35		60	57	56	42
C.Ex.3	65	35		34		38	38	38	36
C.Ex.4	60	40		34		38	35	37	35
C.Ex.5	0	100		---		33	35	37	35
C.Ex.6	---	---	100	---	46	50	49	47	47
(B)									
	Deformation Ratio (%)				Curl Diameter (mm)		Hair Drier Deformation Ratio (%)		
	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo		(Hair Drier 2 minutes)				
Ex.1	163	100	98	Ex.1 Ex.2 Ex.3 Ex.4 Ex.5 Ex.6 Ex.7 C.Ex.1 C.Ex.2 C.Ex.3 C.Ex.4 C.Ex.5 C.Ex.6	64	183			
Ex.2	157	98	98		60	171			
Ex.3	154	100	98		59	169			
Ex.4	143	100	100		55	157			
Ex.5	138	98	98		54	159			
Ex.6	129	102	102		48	141			
Ex.7	126	102	100		48	141			
C.Ex.1	171	97	97	65	186				
C.Ex.2	171	95	93	65	186				
C.Ex.3	112	100	100	45	132				
C.Ex.4	112	100	97	40	118				
C.Ex.5	100	106	112	36	109				
C.Ex.6	109	98	94	52	113				

FIG. 16

Ex.:Example C.Ex.: Comparative Example										
(A)	Composition				Curl Diameter(mm)					
	MXD6 (%)	PET (%)	nylon6 (%)	Thermal Treatment 180°C 2hours	Thermal Treatment 170°C 1hour	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo	Steaming for Recovery	
	Ex.1	97	3	55		30	30	32	56	
	Ex.2	95	5			30	30	32	55	
	Ex.3	90	10			34	34	35	55	
	Ex.4	85	15			35	36	38	54	
	Ex.5	80	20			38	39	40	54	
	Ex.6	75	25			39	40	40	53	
	Ex.7	70	30			40	41	43	53	
	C.Ex.1	100	0	55	---	30	31	32	59	
	C.Ex.2	99	1			30	30	33	58	
	C.Ex.3	65	35			44	46	47	53	
	C.Ex.4	60	40			45	46	47	53	
	C.Ex.5	0	100	---	50	48	50	50	50	
	C.Ex.6	---	---	100	---	62	55	60	64	64
	(B)	(C)								
	Deformation Ratio (%)				Curl Diameter (mm)	Hair Drier Deformation Ratio (%)				
	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo							
	Ex.1	55	100	107	Ex.1	25	45			
	Ex.2	55	100	107	Ex.2	26	47			
	Ex.3	62	100	103	Ex.3	26	47			
	Ex.4	65	103	109	Ex.4	29	54			
	Ex.5	70	103	105	Ex.5	30	56			
	Ex.6	74	103	103	Ex.6	35	66			
	Ex.7	75	103	108	Ex.7	38	72			
	C.Ex.1	55	103	107	C.Ex.1	25	45			
	C.Ex.2	55	100	110	C.Ex.2	25	45			
	C.Ex.3	83	105	107	C.Ex.3	40	75			
	C.Ex.4	85	102	104	C.Ex.4	41	77			
	C.Ex.5	96	104	104	C.Ex.5	47	94			
C.Ex.6	89	109	116	C.Ex.6	50	81				

FIG. 17

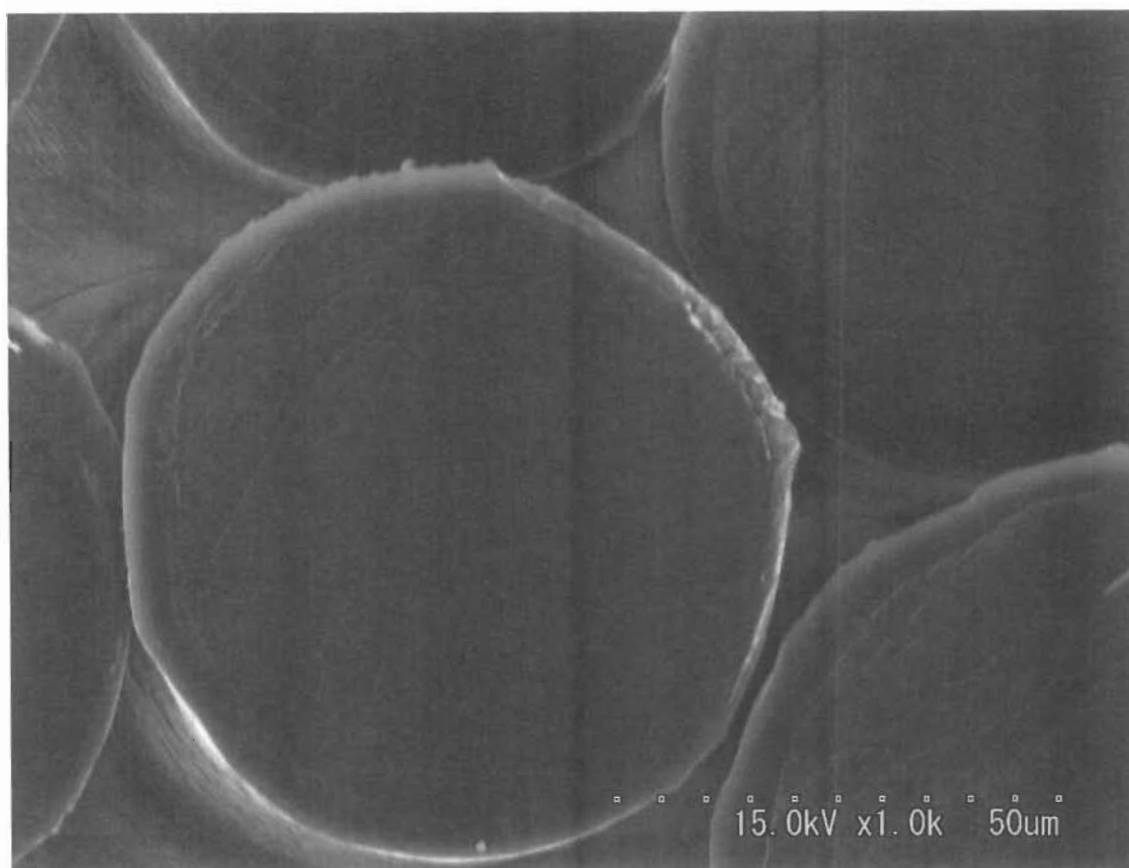


FIG. 18

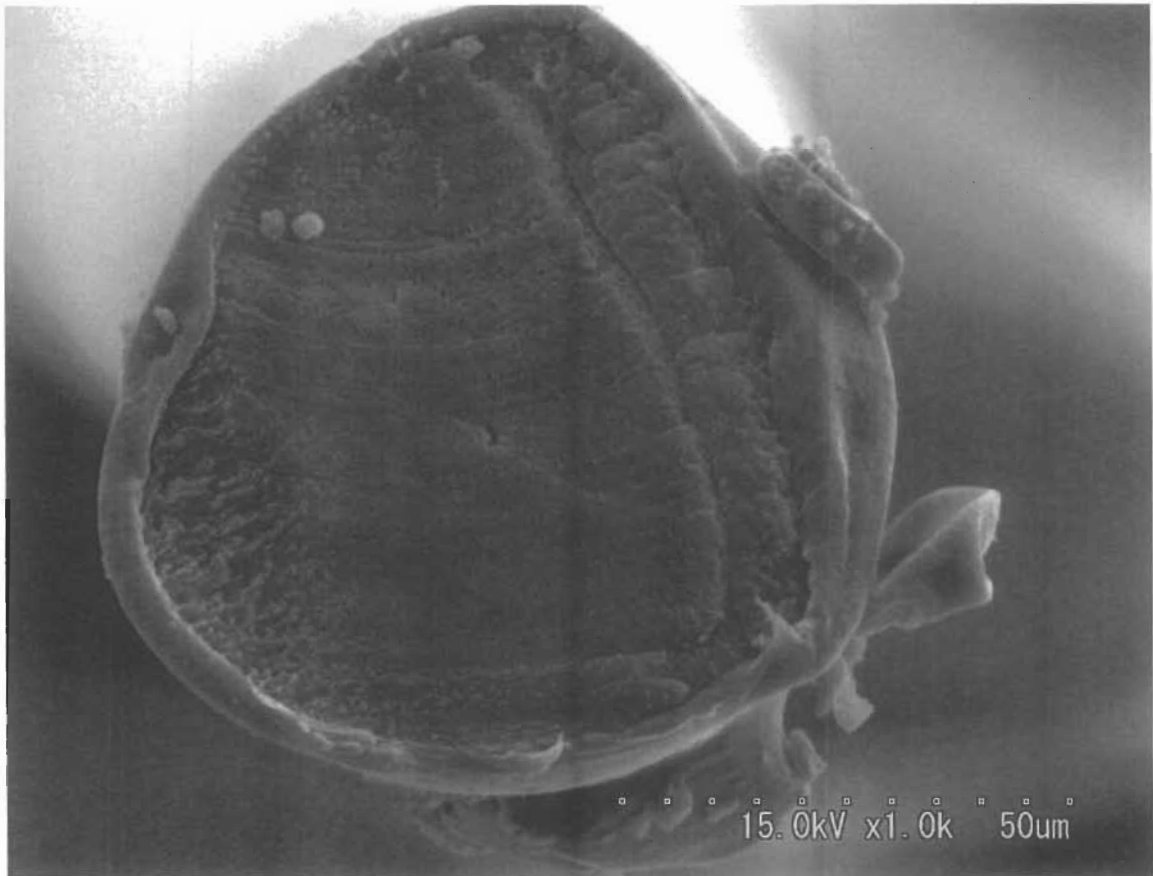


FIG. 19

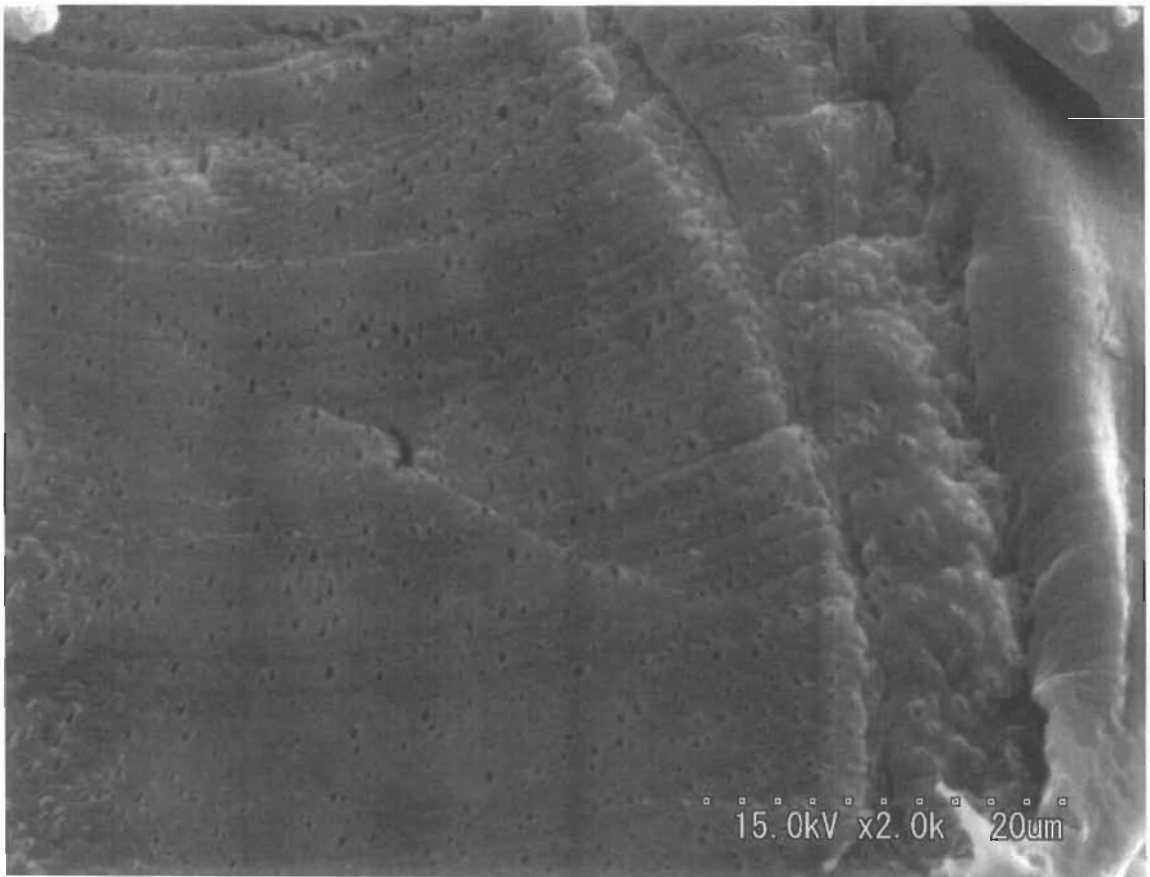


FIG. 20

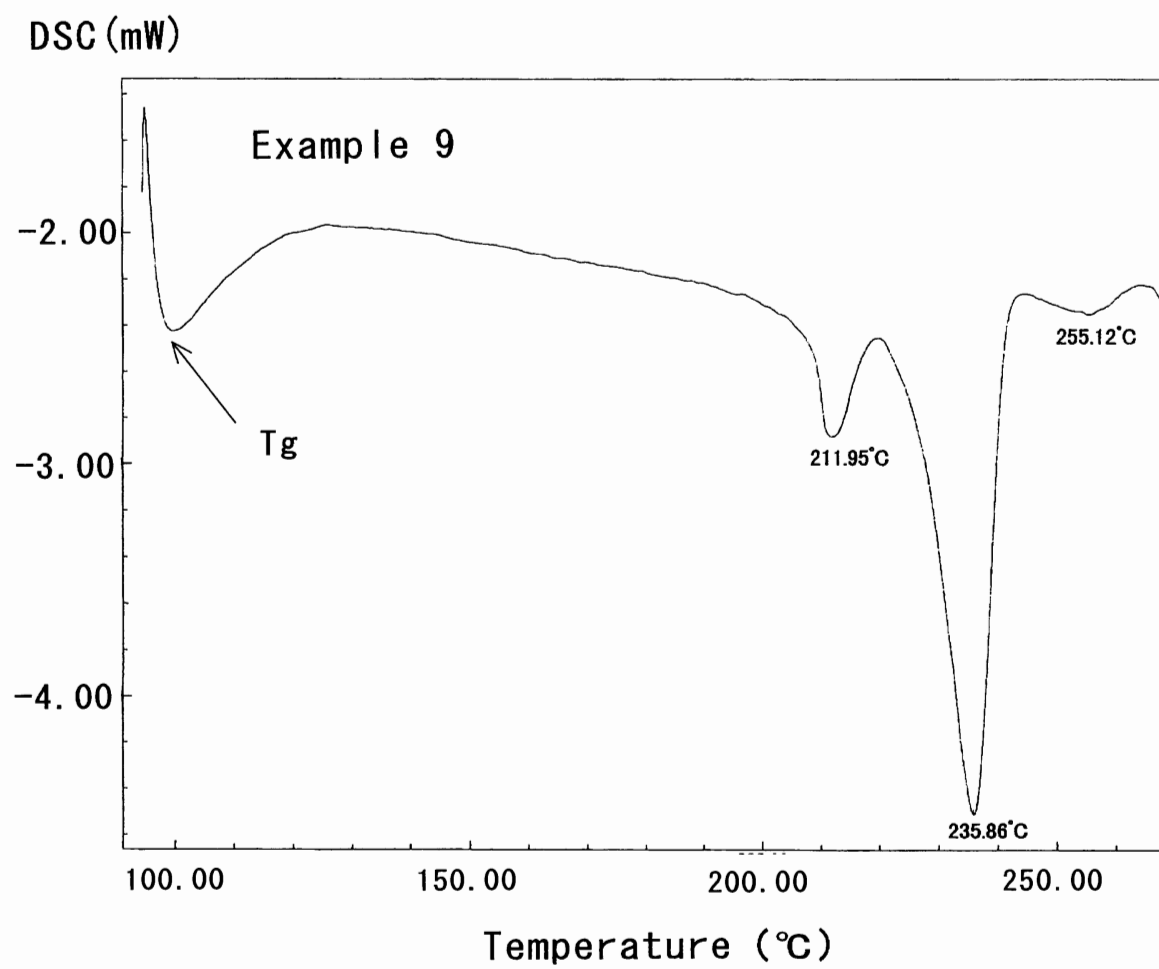


FIG. 21

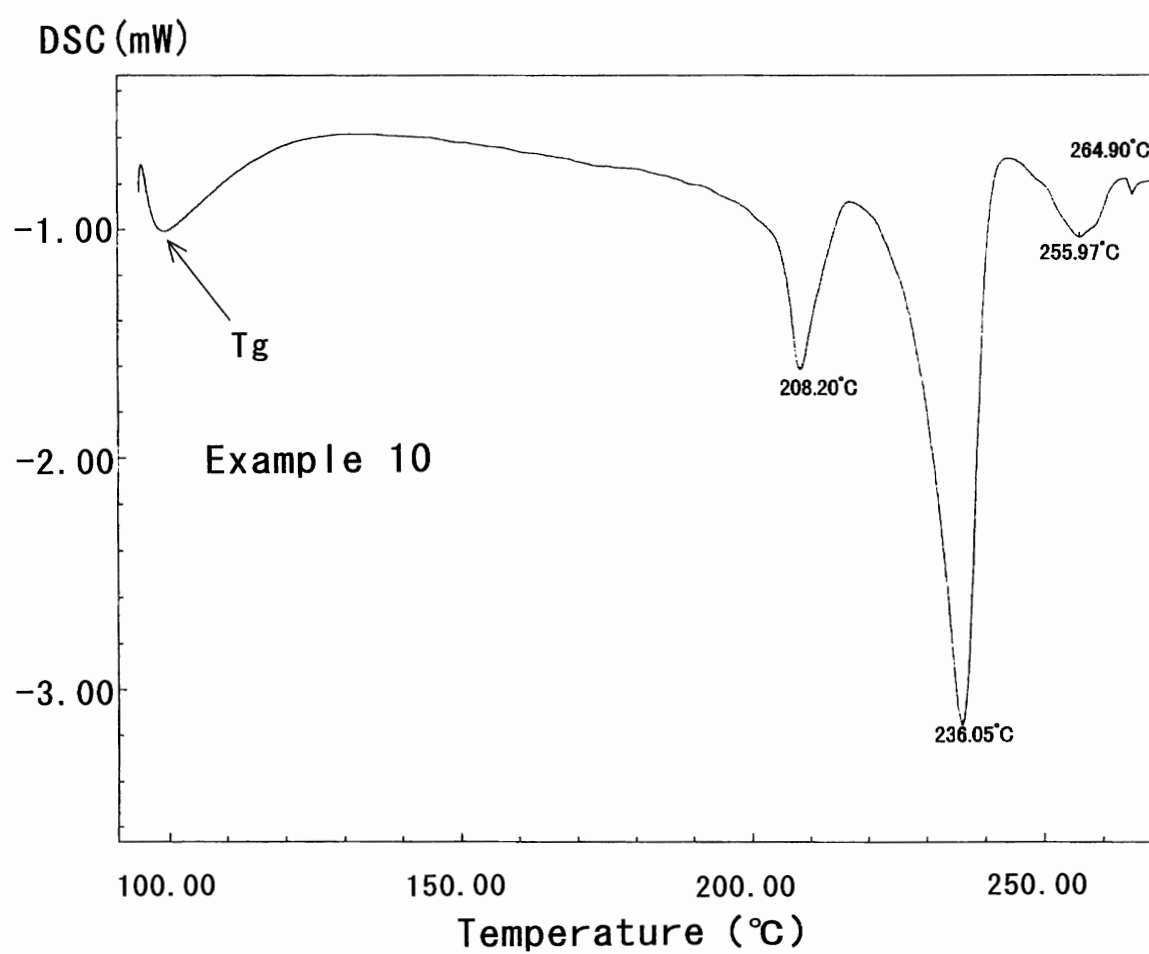


FIG. 22

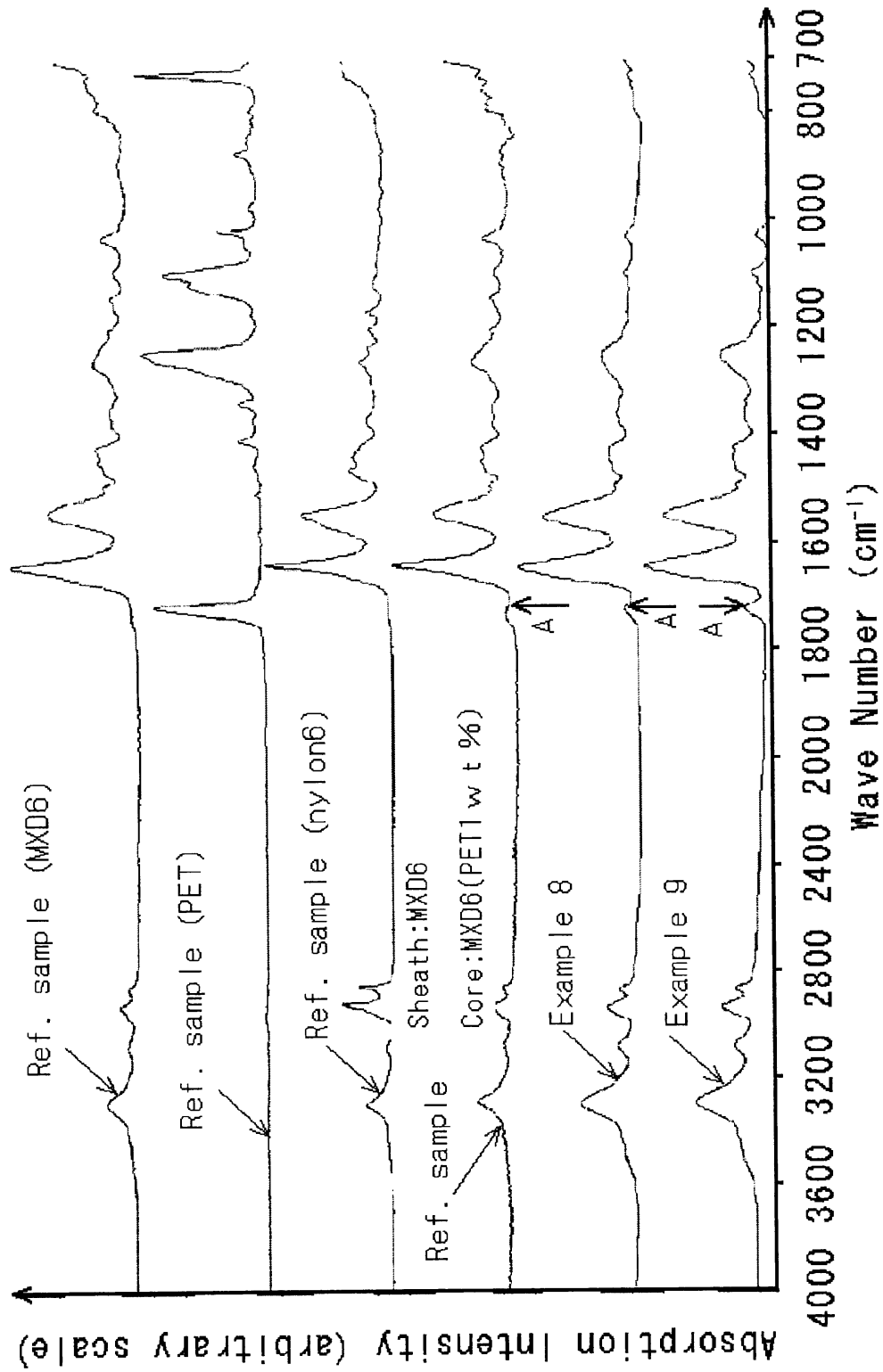


FIG. 23

Ex.:Example C.Ex.: Comparative Example						
(A)	Composition		Curl Diameter(mm)			
	MXD6 (%)	PET (%)	Thermal Treatment 180°C 2hours	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo
Ex.8	97	3	25	49	45	45
Ex.9	95	5	25	46	41	43
Ex.10	90	10	25	43	40	40
Ex.11	85	15	25	40	40	37
Ex.12	80	20	25	38	38	34
Ex.13	75	25	25	35	34	32
Ex.14	70	30	25	30	30	28
C.Ex.7	100	0	25	50	50	50
C.Ex.8	99	1	25	50	49	49
C.Ex.9	65	35	25	27	27	27
C.Ex.10	60	40	25	26	25	25
(B)						
	Deformation Ratio (%)				Curl Diameter (Hair Drier 2 minutes)	
	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo		Hair Drier Deformation Ratio (%)	
Ex.8	196	92	92	Ex.8	55	220
Ex.9	184	89	93	Ex.9	50	200
Ex.10	172	93	93	Ex.10	50	200
Ex.11	160	100	93	Ex.11	46	184
Ex.12	152	100	89	Ex.12	45	180
Ex.13	140	97	91	Ex.13	42	168
Ex.14	120	100	93	Ex.14	35	140
C.Ex.7	200	100	100	C.Ex.7	59	236
C.Ex.8	200	98	98	C.Ex.8	57	228
C.Ex.9	108	100	100	C.Ex.9	30	120
C.Ex.10	104	96	96	C.Ex.10	28	112

FIG. 24

Ex.:Example C.Ex.: Comparative Example									
(A)	Composition			Curl Diameter (mm)					
	MXD6 (%)	PET (%)	Thermal Treatment 180°C 2hours	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo	Steaming for Recovery		
Ex.8	97	3	22	49	45	44	24		
Ex.9	95	5	22	45	42	40	23		
Ex.10	90	10	21	42	40	37	23		
Ex.11	85	15	22	39	35	35	23		
Ex.12	80	20	21	33	32	32	22		
Ex.13	75	25	21	32	29	28	22		
Ex.14	70	30	21	30	29	27	22		
C.Ex.7	100	0	22	50	47	48	30		
C.Ex.8	99	1	22	49	47	48	29		
C.Ex.9	65	35	21	26	25	24	22		
C.Ex.10	60	40	21	23	23	23	21		

(B)									
	Deformation Ratio (%)				Curl Diameter (Hair Drier 2 minutes)		Hair Drier Deformation Ratio (%)		
	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo						
Ex.8	223	92	90				241		
Ex.9	205	93	89				223		
Ex.10	200	95	88				233		
Ex.11	177	90	90				205		
Ex.12	157	97	97				214		
Ex.13	152	91	88				190		
Ex.14	143	97	90				162		
C.Ex.7	227	94	96				255		
C.Ex.8	223	96	98				250		
C.Ex.9	124	96	92				143		
C.Ex.10	110	100	100				133		

(C)									
	Deformation Ratio (%)				Curl Diameter (Hair Drier 2 minutes)		Hair Drier Deformation Ratio (%)		
	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo						
Ex.8	223	92	90				241		
Ex.9	205	93	89				223		
Ex.10	200	95	88				233		
Ex.11	177	90	90				205		
Ex.12	157	97	97				214		
Ex.13	152	91	88				190		
Ex.14	143	97	90				162		
C.Ex.7	227	94	96				255		
C.Ex.8	223	96	98				250		
C.Ex.9	124	96	92				143		
C.Ex.10	110	100	100				133		

FIG. 25

Ex.:Example C.Ex.: Comparative Example						
(A)	Composition		Curl Diameter (mm)			
	MXD6 (%)	PET (%)	Thermal Treatment 180°C 2hours	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo
Ex.8	97	3	37	59	58	57
Ex.9	95	5	35	56	54	55
Ex.10	90	10	35	56	55	54
Ex.11	85	15	35	51	51	50
Ex.12	80	20	35	48	46	45
Ex.13	75	25	35	44	45	43
Ex.14	70	30	34	43	44	43
C.Ex.7	100	0	38	61	60	60
C.Ex.8	99	1	37	61	59	58
C.Ex.9	65	35	34	38	38	38
C.Ex.10	60	40	34	38	38	37
(B)						
	Deformation Ratio (%)				Curl Diameter (Hair Drier 2 minutes)	
	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo			
Ex.8	159	98	97	Ex.8	64	173
Ex.9	160	96	98	Ex.9	59	169
Ex.10	160	98	96	Ex.10	59	169
Ex.11	146	100	98	Ex.11	54	154
Ex.12	137	96	94	Ex.12	54	154
Ex.13	126	102	98	Ex.13	48	137
Ex.14	126	102	100	Ex.14	48	141
C.Ex.7	161	98	98	C.Ex.7	64	168
C.Ex.8	165	97	95	C.Ex.8	64	173
C.Ex.9	112	100	100	C.Ex.9	45	132
C.Ex.10	112	100	97	C.Ex.10	40	118
(C)						
	Deformation Ratio (%)		Curl Diameter (Hair Drier 2 minutes)		Hair Drier Deformation Ratio (%)	
	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo			
Ex.8	159	98	97	Ex.8	64	173
Ex.9	160	96	98	Ex.9	59	169
Ex.10	160	98	96	Ex.10	59	169
Ex.11	146	100	98	Ex.11	54	154
Ex.12	137	96	94	Ex.12	54	154
Ex.13	126	102	98	Ex.13	48	137
Ex.14	126	102	100	Ex.14	48	141
C.Ex.7	161	98	98	C.Ex.7	64	168
C.Ex.8	165	97	95	C.Ex.8	64	173
C.Ex.9	112	100	100	C.Ex.9	45	132
C.Ex.10	112	100	97	C.Ex.10	40	118

FIG. 26

Ex.:Example C.Ex.: Comparative Example						
(A)	Composition		Curl Diameter(mm)			
	MXD6 (%)	PET (%)	Thermal Treatment 180°C 2hours	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo
Ex.8	97	3	57	33	33	35
Ex.9	95	5	56	33	34	35
Ex.10	90	10	56	34	34	35
Ex.11	85	15	55	35	36	38
Ex.12	80	20	54	39	39	40
Ex.13	75	25	54	39	40	40
Ex.14	70	30	53	40	41	43
C.Ex.7	100	0	58	34	35	37
C.Ex.8	99	1	57	34	35	36
C.Ex.9	65	35	53	45	46	47
C.Ex.10	60	40	53	47	47	47
(B)						
	Deformation Ratio (%)			(C)		
	Hair Drier 1 minute	Leaving for 24 hours	40°C Shampoo	Curl Diameter (Hair Drier 2 minutes)		Hair Drier Deformation Ratio (%)
Ex.8	58	100	106	Ex.8	27	47
Ex.9	59	103	106	Ex.9	27	48
Ex.10	61	100	103	Ex.10	27	48
Ex.11	64	103	109	Ex.11	29	53
Ex.12	72	100	103	Ex.12	32	59
Ex.13	72	103	103	Ex.13	37	69
Ex.14	75	103	108	Ex.14	39	74
C.Ex.7	59	103	109	C.Ex.7	27	47
C.Ex.8	60	103	106	C.Ex.8	27	47
C.Ex.9	85	102	104	C.Ex.9	42	79
C.Ex.10	89	100	100	C.Ex.10	44	83

FIG. 27

