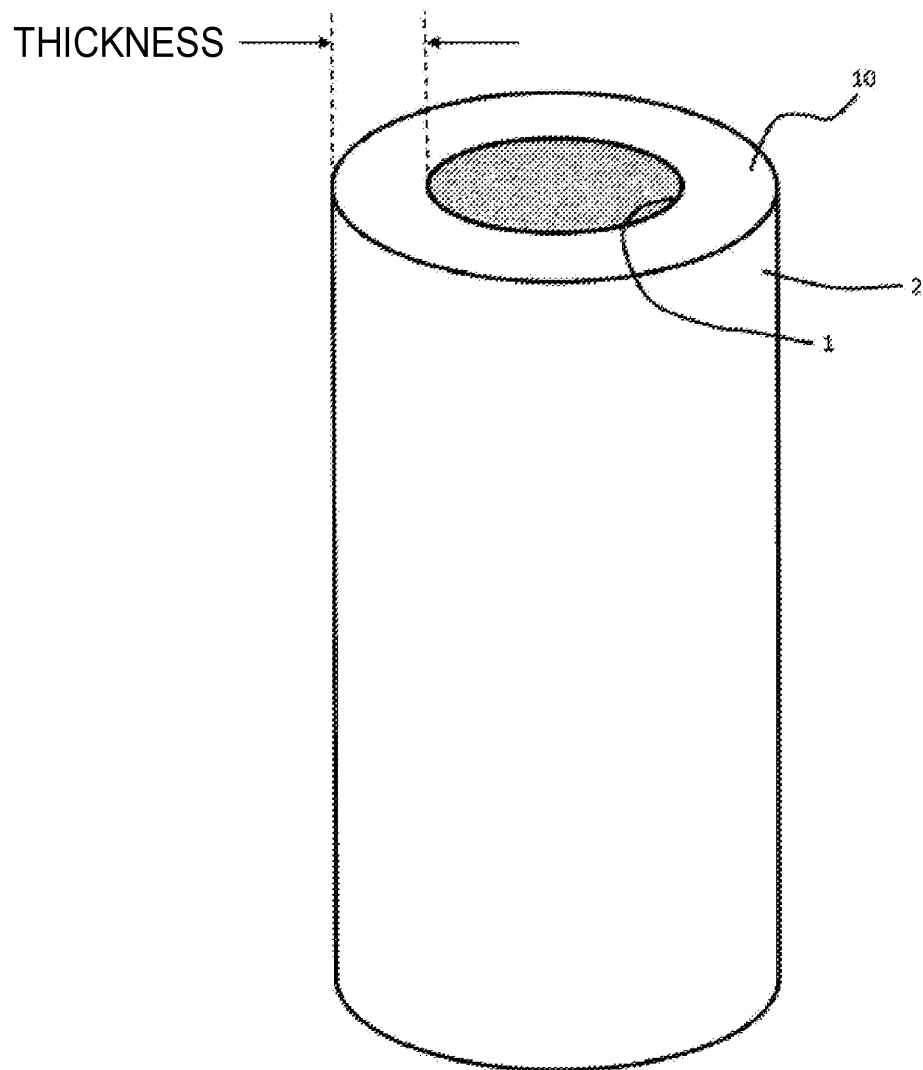


Fig. 1



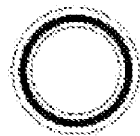
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Fig. 2



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Fig. 3



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Fig. 4

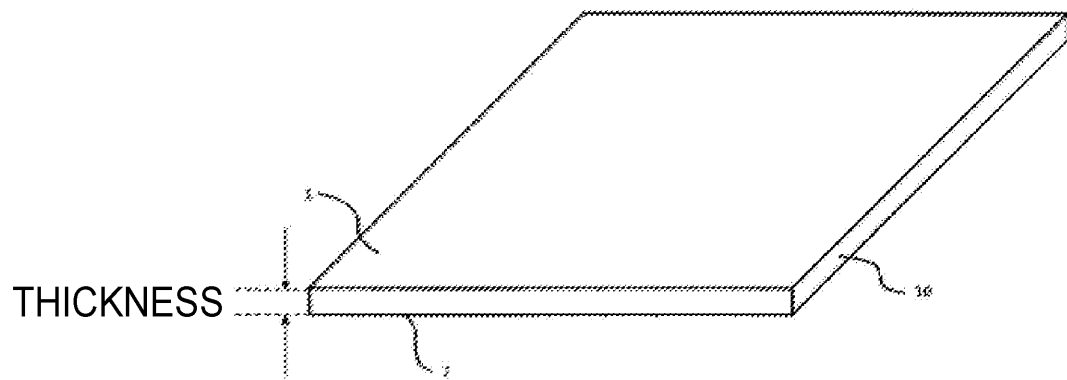
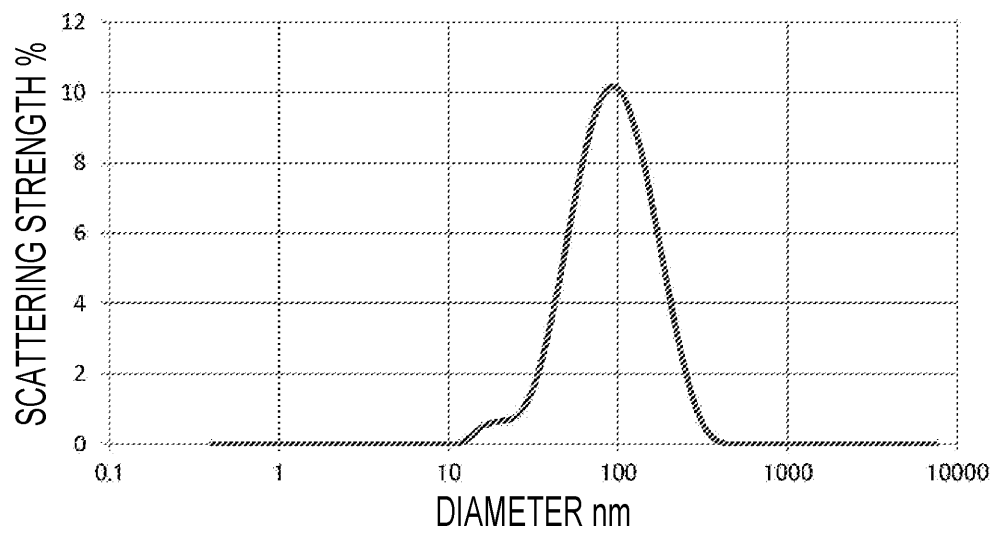


Fig. 5

			EXAMPLE 1	EXAMPLE 2	EXAMPLE 3	EXAMPLE 4	EXAMPLE 5	EXAMPLE 6	EXAMPLE 7	EXAMPLE 8	EXAMPLE 9	EXAMPLE 10	EXAMPLE 11
PRODUCTION CONDITIONS	FOLLOWING AGENT INLET TEMPERATURE		95.0	80.0	62.5	80.0	62.5	62.5	82.5	55.0	80.0	62.5	62.5
	FOLLOWING AGENT OUTLET TEMPERATURE		155.0	150.0	140.0	150.0	140.0	140.0	140.0	135.0	150.0	140.0	140.0
	DIFFERENCE FOLLOWING AGENT TEMPERATURE (OUTLET - INLET)		60.0	70.0	77.5	70.0	77.5	77.5	77.5	80.0	70.0	77.5	77.5
	COAGULATING BATH TEMPERATURE	°C	21.0	22.0	25.0	25.5	25.0	26.0	26.0	30.0	24.0	26.0	30.0
PHYSICAL PROPERTIES	AIR GAP	mm	200	150	100	50	50	50	50	50	30	30	30
	GRAFT RATIO	%	8.7	10.1	8.8	9.8	9.5	10.1	10.2	9.5	9.5	9.1	9.0
	INNER DIAMETER	μm	340.0	329.0	328.0	337.0	334.0	335.0	327.0	329.0	329.0	327.0	328.0
	THICKNESS	μm	45.0	48.0	46.0	48.0	48.0	45.0	48.0	48.0	43.0	43.5	43.2
EVALUATIONS	BUBBLE POINT	MPa	1.80	1.73	1.60	1.59	1.57	1.50	1.51	1.40	1.50	1.46	1.38
	PURE WATER PERMEATION RATE	$\text{L}/\text{m}^2/\text{hrs}/0.1\text{MPa}$	33	35	38	43.9	40	46	44	54.8	45	50	54
	THICKNESS OF DENSE LAYER	μm	10.4	10.0	10.1	15.2	15.1	16.4	13.9	17.2	25.0	26.4	24.8
	EVAPORATION COEFFICIENT OF AMOUNT OF CAPTURED GOLD COLLOIDS		0.28	0.50	0.80	0.39	0.59	0.44	0.73	1.30	0.32	0.66	0.97
	THICKNESS OF DENSEST LAYER	μm	9.6	8.8	7.7	7.8	4.6	3.4	3.6	3.4	3.7	2.8	2.4
	FIRST ATTAINMENT LEVEL	30 nm	37.42	38.43	36.44	28.41	34.42	30.43	30.41	29.41	16.41	16.40	20.39
	SECOND ATTAINMENT LEVEL	20 nm	39.63	40.62	43.60	36.65	43.69	42.70	41.63	40.70	43.77	45.60	43.79
		15 nm	74.98	78.99	80.99	76.95	87.98	90.98	89.97	90.98	89.98	93.100	93.99
	LOGARITHMIC REMOVAL RATE OF GOLD COLLOID	LRV	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40
		20 nm	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40
		15 nm	≥ 1.40	≥ 1.40	≥ 1.40	≥ 1.40	1.20	1.10	0.92	0.50	0.60	0.40	0.30
		10 nm	0.09	0.08	0.07	0.07	0.05	0.05	0.05	0.04	0.04	0.04	0.03
EFFECTS	VIRUS REMOVAL PROPERTY	LRV	≥ 6.00	≥ 6.00	≥ 6.00	≥ 6.00	≥ 6.00	≥ 6.00	≥ 6.00	≥ 6.00	≥ 6.00	≥ 6.00	≥ 6.00
	LRV OF STOP & START	LRV	≥ 6.00	≥ 6.00	≥ 6.00	≥ 6.00	≥ 6.00	≥ 6.00	≥ 6.00	≥ 6.00	≥ 6.00	≥ 6.00	≥ 6.00
	MAXIMUM CAPTURE CAPACITY	$\text{Log}_{10}(\text{TCID}_{50}/\text{m}^2)$	≥ 14.0	13.8	13.5	13.5	13.3	13.1	12.8	12.3	12.5	12.2	11.8

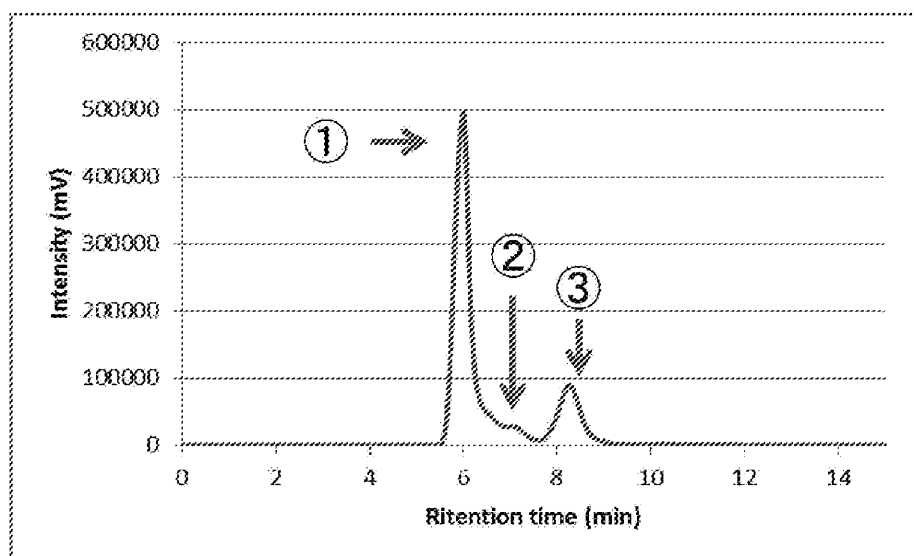
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Fig. 6



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Fig. 7



- ① TRIMER OR HIGHER MULTIMER
- ② DIMER
- ③ MONOMER

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Fig. 8

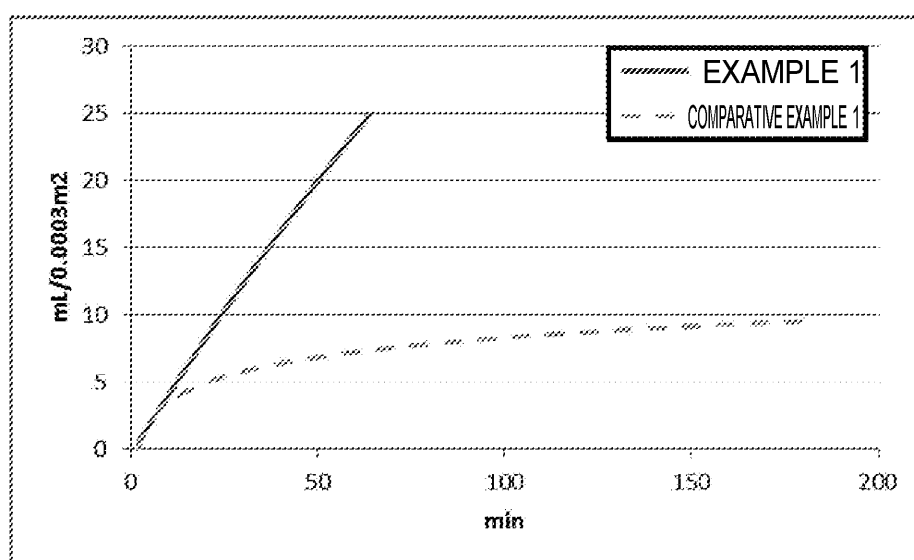
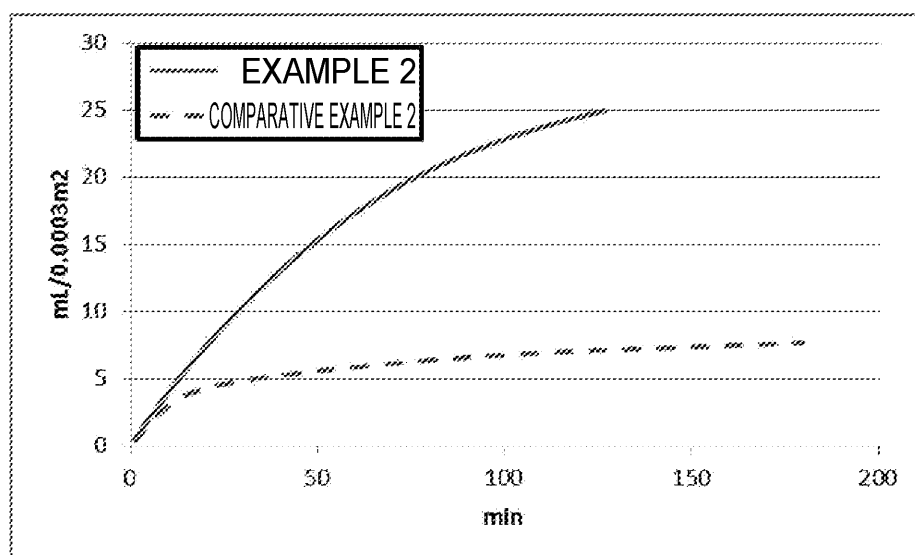


Fig. 9

	CONCENTRATION OF MULTIMER ADDED AMOUNT OF MULTIMER PER SQUARE METER OF VIRUS REMOVAL MEMBRANE		PREFILTER	MATERIAL OF PREFILTER	TIME TAKEN FOR FILTRATION BY VIRUS REMOVAL MEMBRANE	
	$\mu\text{g}/25\text{mL}$	g/m^2			$\text{hr}/(2.5\text{kg}/\text{m}^2)$	
EXAMPLE 1	0.30	1.00	Durapore	PVDF	1.08	
COMPARATIVE EXAMPLE 1	0.30	1.00	NONE	—	>4900	
EXAMPLE 2	1.03	3.40	Virosart Max	POLYAMIDE	2.13	
COMPARATIVE EXAMPLE 2	1.03	3.40	NONE	—	>150000	
EXAMPLE 3	0.15	0.50	Supor	PES	3.00	
COMPARATIVE EXAMPLE 3	0.15	0.50	NONE	—	1850	
EXAMPLE 4	0.30	1.00	SYRINGE FILTER NY	NYLON	47	
COMPARATIVE EXAMPLE 4	0.30	1.00	NONE	—	>4900	

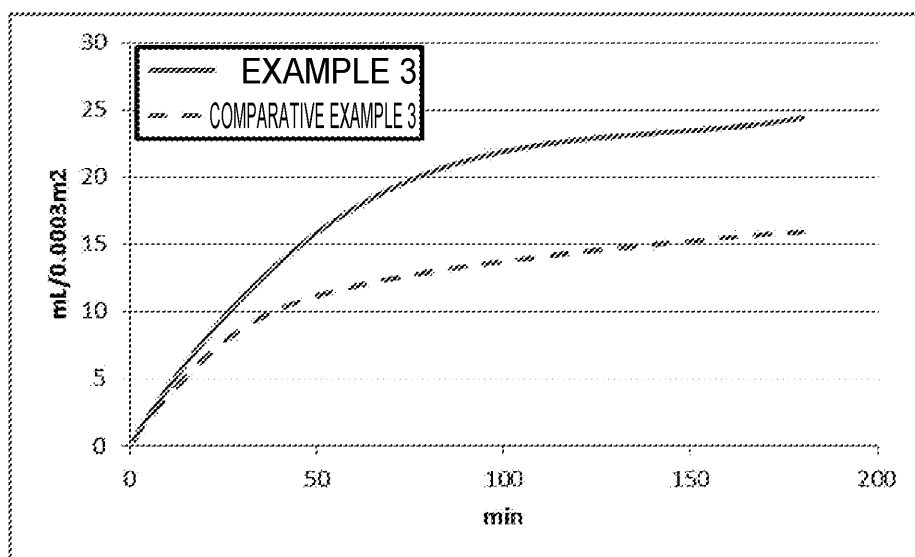
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Fig. 10



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Fig. 11



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Fig. 12

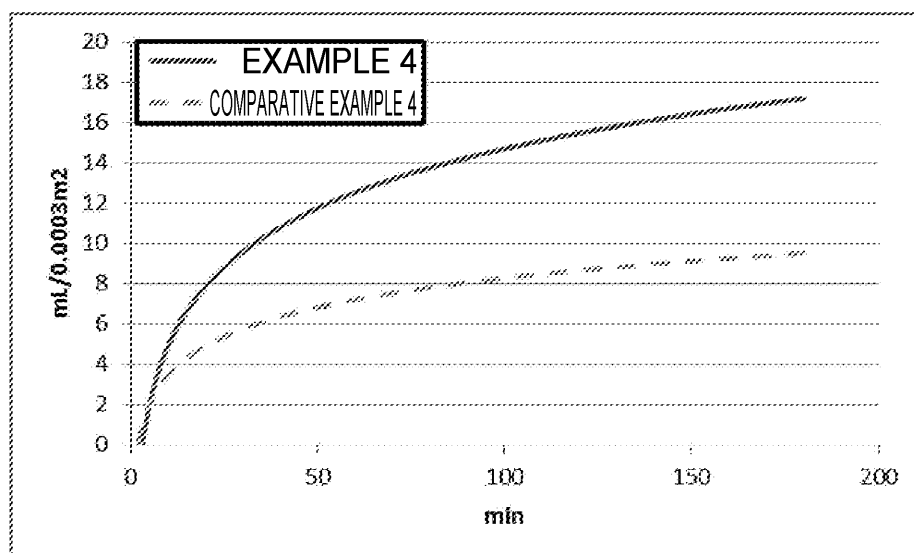


Fig. 13

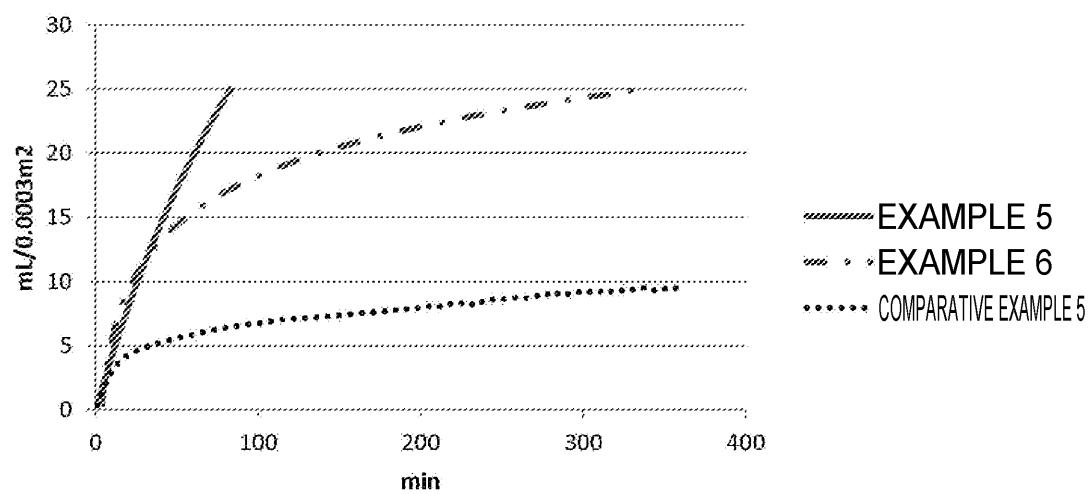


Fig. 14

	CONCENTRATION OF MULTIMER ADDED AMOUNT OF MULTIMER PER SQUARE METER OF VIRUS REMOVAL MEMBRANE $\mu\text{g}/25\text{mL}$	g/m^2	PREFILTER	MATERIAL OF PREFILTER	TIME TAKEN FOR FILTRATION BY VIRUS REMOVAL MEMBRANE $\text{hr}/(2.5\text{kg}/\text{m}^2)$
EXAMPLE 5	1.03	3.40	Durapore	PVDF	1.40
EXAMPLE 6	1.03	3.40	Virosart Max	POLYAMIDE	5.67
COMPARATIVE EXAMPLE 5	1.03	3.40	NONE	---	>150000