

1	<b>METHODS</b>	31	.Cylinder or cylinder portion
2	<b>WITH SIGNAL, INDICATOR OR</b>		moved linearly and radially
3	<b>TRANSPARENT INSPECTION MEANS</b>	32	<b>SELF-ACTING UNIDIRECTIONAL FLOW</b>
4	<b>DIVERSE ROTARY EXPANSIBLE CHAMBER</b>		<b>WITH REVERSE ROTATION OR</b>
	<b>DEVICES</b>		<b>REVERSE FLOW WITH</b>
4	<b>WORKING MEMBER OR CYLINDER</b>		<b>UNIDIRECTIONAL ROTATION</b>
	<b>SURFACE HAS ALTERNATE LINEAR</b>	33	<b>INTERMITTENTLY ACCELERATED AND</b>
	<b>AND CURVILINEAR MOVEMENT</b>		<b>RECEDING MEMBERS ROTATE IN</b>
	<b>(E.G., ENDLESS)</b>		<b>SAME PATH (ALTERNATING PISTON</b>
5	<b>MULTISTAGE</b>		<b>TYPE)</b>
6	.One working chamber stage	34	.Moving cylinder
	encircles another	35	.Each a working member
7	.Successive stages alternately	36	..Working member movement
	produce work		controlled by interengaging
8	.Working fluid engages working		rotating members
	member serially in	37	..Working member movement
	circumferentially spaced		controlled by member rotating
	working chambers		about parallel axis
9	.Interengaging rotary members	38	..Cam controlled working member
10	..Three or more		movement
11	.Sliding abutment	39	<b>CONVERTIBLE OR CHANGEABLE BY</b>
12	.Swinging abutment		<b>ASSEMBLY OR DISASSEMBLY</b>
13	.Sliding vane	40	<b>SPEED CONTROLLED</b>
14	<b>WITH DELAYED LOAD</b>	41	.Rotating weight valves working
15	<b>WITH PLURAL WORKING FLUID INLET</b>		fluid passage
	<b>OR OUTLET PASSAGES</b>	42	.Rotating weight positioned on or
16	<b>WITH CHANGEABLE WORKING CHAMBER</b>		within inner rotating member
	<b>MAGNITUDE</b>	43	.Weight rotates about axially
17	.Speed controlled		extending axis
18	.Intermittently accelerated and	44	..Other than working member axis
	receding members rotate in	45	<b>COLLAPSIBLE PROGRESSIVELY</b>
	same path (alternating piston		<b>DEFORMED WORKING CHAMBER WALL</b>
	type)	46	<b>WITH REMOVAL OR ACCOMMODATION OF</b>
19	.Intermeshing rotary members		<b>SOLID FOREIGN MATERIAL IN</b>
20	..Three or more		<b>WORKING FLUID</b>
21	..Movable member moved axially	47	.With filter
22	.Axially or radially spaced	48	<b>UNLIKE HELICAL SURFACES ON</b>
	working chambers		<b>RELATIVELY WOBBLING ROTATING</b>
23	.By adjustably limiting vane or		<b>MEMBER AND ENCOMPASSING</b>
	abutment movement		<b>CYLINDER (E.G., MOINEAU TYPE)</b>
24	.Spring or fluid biased movable	49	<b>NUTATING WORKING MEMBER</b>
	member	50	.Non-metallic working member or
25	..Positively biased in opposite		working chamber portion
	directions	51	.With mechanical sealing
26	...With working fluid bias	52	.Working member common to plural
27	..Spring		working chambers
28	.By axial movement of movable	53	..Axially spaced working chambers
	member	54	<b>WORKING MEMBER HAS PLANETARY OR</b>
29	.Rotating inner working or		<b>PLANETATING MOVEMENT</b>
	reacting member repositioned	55.1	.Helical working member, e.g.,
	relative to cylinder		scroll
30	.By cylinder or cylinder portion	55.2	..Having specific wrap or end
	pivotal movement		plate, e.g., shape, material,
			coating

55.3	..With specific rotation preventing or rotation coupling means	78	.Working fluid portion fills intertooth spaces or spaces between adjacent vanes
55.4	..With mechanical sealing	79	.Radial groove
55.5	..With biasing means, e.g., axial or radial	80	.Radially spaced grooves
55.6	..With lubricant, liquid seal or nonworking fluid separation	81	.Annular groove or recess completely encircles rotation axis
56	.Non-metallic working member, cylinder or partition	82	.Groove communicates with vane slot
57	.Adjustable or resiliently biased working member	83	<b>HEAT EXCHANGE OR NON-WORKING FLUID LUBRICATING OR SEALING</b>
58	.Plural working members or chambers	84	.With condition responsive control of non-working fluid
59	..Radially spaced working chambers	85	.With heat exchange means for non-working fluid
60	..Axially spaced working members	86	.Heat exchange by diverted incoming or outgoing working fluid
61.1	..Circumferentially spaced working chambers	87	.Valve regulated non-working fluid
61.2	...Rotor has one more lobe than cylinder (i.e., Wankel type)	88	.With pump for non-working fluid
61.3	...Rotor has one less lobe than cylinder (i.e., Gerotor type)	89	.With filter for non-working fluid
62	.Partition pivotally connected to working member and cylinder	90	.Wick or absorbent material feed
63	.With relatively movable partition member	91	.Non-working fluid passage in inner working or reacting member
64	..Slidable in working member	92	..With non-working fluid passage in partition
65	..Having working fluid passage	93	..Non-working fluid biases vane
66	..Integral with working member	94	..With non-working fluid passage in drive shaft
67	..Pivoted to working member	95	.Vent or non-seal means prevents working and non-working fluid intermix
68	<b>ROTATING INTERNAL MEMBER ROTATES AND OSCILLATES OR RECIPROCATES WITH FRANGIBLE DRIVE CONNECTION OR CLUTCH</b>	96	.Outer cylinder member immersed or submerged in non-working fluid
69	<b>WITH RAPID DISASSEMBLY FEATURE (I.E., WITHOUT TOOLS)</b>	97	.Non-working and working fluids intermix in working chamber
70	<b>WITH RAPID DISASSEMBLY FEATURE (I.E., WITHOUT TOOLS)</b>	98	..Non-working fluid initially directed to shaft bearing
71	<b>PRESSURE FLUID RADIALLY BALANCES WORKING OR ROTATING ABUTMENT MEMBER</b>	99	..Non-working fluid initially directed to working member
72	.With counterbalancing fluid passage through rotating member	100	.Intermixed incoming working and non-working fluids
73	.Counterbalancing fluid directed to rotating member shaft bearing	101	.With coolant air impelling means or finned cylinder surface
74	.Counterbalancing fluid directed to intertooth spaces or spaces between adjacent vanes	102	<b>SHAFT OR TRUNNION LUBRICATION OR SEALING BY DIVERTED WORKING FLUID PORTION</b>
75	<b>GROOVED ABUTTING CYLINDER-ROTATING MEMBER END SURFACES</b>		
76	.Non-working fluid directed to groove		
77	.Grooved working member surface		

103	<b>WORKING MEMBER PERIPHERAL SURFACE</b>	134	..Adjustable end wall
	<b>COMPRISES RELATIVELY</b>	135	..Spring biased
	<b>CIRCUMFERENTIALLY MOVABLE</b>	136	.Seal element between working member and vane
	<b>SEGMENTS</b>		
104	<b>WITH MECHANICAL SEALING</b>	137	..Mounted on working member
105	.Abutment position adjustment	138	...Oscillating
106	.Vane position adjustment	139	.Seal element between abutment and cylinder or working member
107	.By changing working member or cylinder relative position	140	.Seal element between working member and cylinder
108	..Radially adjustable		
109	...Adjustable working member	141	..Labyrinth
110	.By axially relatively moving working member sections	142	..On working member
		143	...On working member circumferential periphery
111	.By axially relatively moving vane or abutment sections	144	..Between adjacent cylinder and working member sides
112	.Seal on working member periphery separates inlet and outlet ports	145	.Seal element between vane and cylinder
113	..Seal on working member peripheral projection engages cylinder working chamber surface (e.g., apex seals)	146	..On vane side
		147	..Movable seal on vane
		148	...Positively urged to engage cylinder
114	..Adjustable or expandable peripheral projection	149	.Seal element between stationary cylinder parts
115	...Weight balanced or adjustable seal	150	<b>WORKING CHAMBER SURFACE EXPRESSED MATHEMATICALLY</b>
116	...Ring seal or arcuate seal portion	151	<b>WEIGHT BALANCED WORKING MEMBER OR PARTITION</b>
117	..With plural circumferentially spaced peripheral seals	152	<b>NON-METALLIC WORKING MEMBER, CYLINDER OR PARTITION</b>
118	..Swinging seal	153	.Resilient
119	..Integral peripheral and depending side seal	154	..Partition integral with working member
120	...With axially movable side seal	155	...Extending from working member side
121	...Spring biased		
122	...Spring biased	156	<b>RESILIENT WORKING MEMBER, CYLINDER OR PARTITION</b>
123	...Fluid biased		
124	...Fluid biased	157	<b>SHOCK OR PRESSURE RELIEVING YIELDABLE PERIPHERAL WORKING MEMBER OR CYLINDER SURFACE PORTION</b>
125	.Seal on cylinder engaging rotary member separates inlet and outlet ports		
126	..Engages plural rotary members	158	<b>MAGNETICALLY BIASED VANE OR ABUTMENT</b>
127	..Adjustable		
128	...With resilient interposed member	159	<b>ADJUSTABLE WORKING CHAMBER PERIPHERAL WALL CONTROLS WORKING FLUID FLOW MOVING CYLINDER</b>
129	..With resilient biasing means		
130	.Cup shaped cylinder axially movable to abut cylinder side	160	.Rotating
		161	..With axially movable partition member
131	.Axially movable end wall or end wall portion	162	...Cylinder and internal member rotate about non-parallel axes
132	..Progressively biased from inlet to outlet	163	..Rotary internal reacting member
133	..Surface abutting working member abuts another coplanar cylinder surface portion	164	...Cylinder engages plural internal reacting members
		165	

166	...Intermeshing peripheral surfaces	200	..With axially spaced working members
167	...With intake or exhaust passage in internal member	201.1	.Helical or herringbone
168	...Cylinder periphery comprises alternate tooth and passage portions (e.g., cage type)	201.2	..With valve
169	....With filler element (e.g., crescent)	201.3	..Having specific tooth shape
170	...With filler element (e.g., crescent)	202	..Each member having opposed axially spaced helices
171	...Inner member has five or more teeth	203	..Axially counterbalanced
172	..With movable partition member	204	.Eccentrically mounted
173	...Partition radially slidable in internal member	205	.Like rotary members
174	...Partition radially slidable in cylinder	206.1	..Having each radial protuberance of like dimension
175	..Moving partition on stationary member	206.2	...With timing gear adjustment or arrangement
176	..Swinging partition	206.3	...With heating or cooling
177	..Sliding partition	206.4	...Having specific inlet or outlet port shape
178	<b>WITH WEAR SURFACE TREATMENT OR INTEGRALLY PLATED WEAR LAYER</b>	206.5	...Having specific rotor or tooth shape
179	<b>SPECIFIC MATERIAL</b>	206.6	...With sealing means
180	<b>APERTURED BYPASS TO PRESSURIZE OR RELIEVE WORKING CHAMBER ZONE OF INTERMEDIATE PRESSURE</b>	206.7	...With bearings
181	<b>COMBINED</b>	206.8	...With lubrication
182	<b>RELATIVELY MOVABLE WORKING MEMBER AND DRIVE SHAFT AXES</b>	206.9	...Using specific material
183	<b>WITH SUPPLY OR EXHAUST PASSAGE IN WORKING MEMBER</b>	207	<b>RELATIVELY MOVING WORK</b>
184	.Passage includes vane slot		<b>TRANSMITTING BARRIERS MOVE IN SEPARATE INTERSECTING CHAMBERS</b>
185	.Controlled by working member carried valve	208	<b>MOVABLE INTERMEDIATE PARTITION ENGAGES PERIPHERIES OF PLURAL SPACED WORKING MEMBERS</b>
186	.Supply and exhaust passages in working member	209	<b>PLURAL WORKING CHAMBERS</b>
187	..Passage extending through working member center of rotation	210	.Axially spaced rotating members rotate on common axis
188	.Supply or exhaust passage through working member center of rotation	211	..With axially moving vane or abutment
189	<b>TRAPPED FLUID RELIEF</b>	212	..Intermediate member separates and engages plural working members
190	.With tooth modification	213	...Plural intermediate members
191	<b>INTERENGAGING ROTATING MEMBERS</b>	214	...Interconnected abutments
192	.With movable partition	215	.Axially spaced working chambers
193	..Axially moving	216	..Helical working member or working member portion
194	.Each tapered	217	..Axially moving abutment or vane
195	.Non-parallel axis	218	...Moving about non-parallel axis
196	.Three or more	219	...Vane
197	..Helical or herringbone	220	<b>HELICAL WORKING MEMBER</b>
198	.Intermittent rotation	221	<b>MOVING ABUTMENT AND VANE</b>
199	.Multiple units	222	<b>SEPARABLE ABUTMENT</b>
		223	<b>WITH SECONDARY VANE OR ABUTMENT MOVING MEANS</b>
		224	<b>VALVED VANE OR ABUTMENT</b>
		225	<b>VANE OR ABUTMENT COMPRISES ROTATABLE ELEMENT</b>
		226	.Rotates about non-parallel axis
		227	.Positively rotated

228	<b>AXIALLY MOVING VANE OR ABUTMENT</b>	269	..Constantly interposed pressure fluid spreads plural vanes
229	.Sliding		
230	..Positively biased	270	<b>MISCELLANEOUS</b>
231	...In opposite directions		
232	...Spring or fluid bias		
233	.Radially pivoted vane		
234	<b>TAPERED VANE OR ABUTMENT (E.G., WEDGE SHAPED)</b>		<b><u>FOREIGN ART COLLECTIONS</u></b>
235	<b>WEAR ELEMENTS OR ANTIFRICTION MEANS IN VANE OR ABUTMENT SLOT</b>	FOR	<b>CLASS-RELATED FOREIGN DOCUMENTS</b>
236	<b>NON-RADIALLY POSITIONED SLIDING VANE OR ABUTMENT</b>		
237	.Arc shaped		<b><u>DIGESTS</u></b>
238	.Positively biased		
239	<b>ALTERNATELY USABLE VANE OR ABUTMENT STRUCTURE FOR REVERSE WORKING MEMBER ROTATION</b>	DIG 1	<b>NON-WORKING FLUID SEPARATION</b>
240	<b>INTERCONNECTED ABUTMENTS</b>		
241	<b>ABUTMENT OR VANE HAS CONCURRENT ROCKING AND RADIALLY SLIDING MOVEMENT</b>		
242	<b>SPACED OSCILLATING ABUTMENT PORTIONS ENGAGE WORKING MEMBER</b>		
243	<b>POSITIVELY ACTUATED ABUTMENT</b>		
244	.Cam actuated		
245	..In opposite directions		
246	..Spring or fluid biased in opposite direction		
247	.In opposite directions		
248	.Spring biased		
249	.Fluid biased		
250	..Winged abutment		
251	..With working fluid passage in abutment		
252	<b>WITH PROVISION FOR QUICK VANE REPLACEMENT</b>		
253	<b>INTERCONNECTED VANES</b>		
254	.Integrally connected		
255	..Diametrically aligned		
256	.Encompassing moving member interconnects plural vanes		
257	.Interposed movable member interconnects plural vanes		
258	..Spring		
259	<b>POSITIVELY ACTUATED VANE</b>		
260	.Cam actuated		
261	..In opposite directions		
262	...With pivoted interposed lever		
263	...With spring or fluid bias		
264	...With roller		
265	.In opposite directions		
266	.Spring biased		
267	..With fluid bias		
268	.Fluid biased		

