1	CONTROL FOR FORWARD AND REVERSE	27	Mounted on laterally shiftable
2	.Cyclical or sequential (e.g., machine controlled, etc.)	28	.Fluid pressure actuator for
3	Including device for shifting		adjustment of member
0	belt laterally of its direction of run	29	.Including actuator interconnecting plural pulleys
4	.Including separate belts for		on spaced shafts for simultaneous adjustment
F	Torward and reverse	30	For axial adjustment of each
5	Belt selection by shifting or		member on each pullev
C	tightening belt	31	By dual lever mechanism
6	Including device for shifting	32	Plural members forming plural
	direction of run		belt-receiving grooves on
7	.Including coaxial pulleys	2.2	With members server to pluse
	rotated in opposite directions by single endless belt	22	grooves
	simultaneously engaging both	34	Plural members common to plural grooves
8	PULLEY WITH BELT-RECEIVING GROOVE	35	Axially spaced members
0	FORMED BY DRIVE FACES ON		simultaneously adjustable
	RELATIVELY AXIALLY MOVABLE	36	On bolt radially spaced from
	COAXIAL CONFRONTING MEMBERS		pulley axis
	(E.G., EXPANSIBLE CONE PULLEY, ETC.)	37	.By manual actuator for one or both confronting members
9	.Members are gripping jaws	38	With neutral condition of drive
	actuated during each rotation	39	Screw actuated
	of pulley	40	With additional linkage in
10	Via relatively rotating cam and		actuator drive train
	follower	41	By opposite-handed screw
11	.Speed responsive		threads engaging adjacent
12	And load responsive		members
13	To centrifugal force	42	With means to positively lock
14	Via pivoted weight		members in adjusted position
15	Via ball	43	.Including lubrication or
16	Via liquid		particular guide or bearing
17	.Load responsive		for movable member
18	With actuator driven by	44	Self-lubricated bearing
	electrical or fluid motor	45	With lubrication of support for
19	Via relatively rotating cam and		movable member
	follower	46	.With spring device
20	Including interengaged threads	47	PULLEY WITH EXPANSIBLE RIM MEANS
21	Including plural separate cam		OR PULLEYS WITH ALTERNATELY
	and follower pairs for		USEABLE NESTABLE RIMS
	adjusting plural members	48	.Nestable rims of diverse kind
22	.Temperature responsive		(e.g., one grooved and the
23	.Adjusted by power from pulley		other cylindrical, etc.)
	drive train	49	.Structure for variably adjusting
24	.And member has plural,		radius of rim section
	relatively axially movable drive faces	50	By actuator responsive to speed or load
25	.And pulley shiftable laterally	51	By fluid pressure actuator or
	of its axis of rotation		inflatable rim
26	Mounted on laterally shiftable		
	motor		

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52	Including means interconnecting
	plural pulleys for
	simultaneous adjustment
53	Pulleys on spaced axes
54	By actuator having collar
	concentric with, and movable
	axially on, pulley axis
55	Collar interconnected with rim
5.6	sections via pivoted link
56	By actuator having collar
	concentric with, and rotatable
	in plane perpendicular to
57	Coller interconnected with rim
57	
50	
20	CUTERADIE DO DIFERPENT DONED
	OUTIDIT LOCATIONS DELATIVE TO
	TNDIT DULLEY
59	Pivotable about plural aves
60	Nonparallel aves
61	DOMER INDIA AND OUTDUT BULLEYS ON
01	NONDADALLEL AYES
62	With common belt engaging both
02	nullevs
63	And shiftable quide roll
00	engaging belt run
64	PLURAL TURNS OF SAME BELT ABOUT
-	PULLEY AXIS
65	.With flexible belt-tracking
	guide helically coiled about
	pulley
66	.Plural turns of same belt about
	axis of each of laterally
	spaced pulleys
67	With guide roll
68	Plural guide rolls
69	CONTROL FOR VARIABLE INPUT TO
	OUTPUT SPEED-RATIO
70	.Condition responsive (e.g.,
	responsive to speed, load,
	etc.)
71	.Cyclical or sequential (e.g.,
	machine controlled, etc.)
72	.Including intermeshing gears in
	one drive train
73	.Including separate belt on each
	of coaxial pulleys selectively
	engaged in drive train
.74	With overrunning clutch
75	Selection by tightening belt on
	selected pulley

76	Coloction by ovially moughle
70	Selection by axially movable
	solocted pullow
77	Including coavial pullous
//	abiftable avially to align
	solocted pullow with drive
	bolt
78	Including bolt shiftable avially
70	from one to another surface of
	stepped pulley or coaxial
	nulleys of different diameter
79	And nulley pivotally mounted to
12	facilitate belt shift
80	And including belt-shifter
00	mechanism
81	For shifting belt from both
	power input and power output
	pulleys
82	Shifter mechanism including
	parallelogram linkage
83	.Including mechanism for shifting
	belt axially on spaced pulleys
	with tapering drive face
84	PLURAL BELTS OR PLURAL OUTPUT
	LOADS
85	.Plural belts having interengaged
	drive surfaces
86	.Plural output loads
87	With common belt concurrently
	engaging input and plural
	output pulleys
88	.Plural belts in series via
	countershaft
89	Countershaft laterally
	shiftable
90	STATIC ELECTRICITY ELIMINATOR
91	STRUCTURE FACILITATING
	LUBRICATION OF BELT, PULLEY,
0.0	OR GUIDE ROLL
92	CLEANING DEVICE FOR BELT, PULLEY,
0.2	OR GUIDE ROLL
93	FLUID-IMPELLING MEANS (E.G., FOR
0.4	COOLING, ETC.)
94	RESILIENT CONNECTION BETWEEN
	MOINT
95	HUB FORMED IN SECTIONS AND
	SEPARABLE BY MOUTING SECTIONS
	RADIALLY APART (E.G. SPI.TT
	PULLEY TO FACILITATE
	INSTALLATION, ETC.)

96	And severance lines for separable rim sections diametrically opposite each other	119	.Belt shifter for shifting belt laterally or for selective engagement and supported disengagement of belt with
97	With spokes connecting hub	120	pulley
0.0	section and rim section	120	Pulley has slot in groove-
98	Plural integral spokes		forming flange facilitating
99	With discrete means	101	belt installation or removal
	connecting outer ends of	$\perp \angle \perp$	For shifting exterior surface
	integral spokes to rim		of belt into engagement with
100	AUXILIARY ENDLESS BAND FOR		pulley
	GUIDING BELT OR HOLDING BELT	122	For shifting belt laterally
	ENGAGED WITH PULLEY	123	By adjusting axial inclination
101	MEANS FOR ADJUSTING BELT TENSION		of belt guide roll
	OR FOR SHIFTING BELT, PULLEY	124	With idler support having
	OR GUIDE ROLL		circumferentially spaced
102	.With sensor for controlling		rollers to receive shifted
	operation of shifter to		belt
	correct belt training	125	Including means for
	deviation		selectively clutching coaxial
103	Shifter driven by electrical or		idler support to pulley
	fluid motor	126	Shifter actuated by screw or
104	Fluid motor		gear drive
105	Sensor actuates pawl-and-rachet mechanism to operate shifter	127	Shifter actuated by flexible cable
106	Sensor includes rotatable belt-	128	Shifter actuated by handle
	engaging surface		pivoted about fixed axis
107	Rotatable on same axis as	129	And connector link between
	shiftable guide roll or pulley		handle and shifter pivotable
108	To initiate relative axial		about spaced fixed axis
	movement of belt-engaging	130	Portable hand tool for removing
	surfaces of guide roll or		or installing belt
	pulley	131	.Guide roll forms belt-thickness
109	.Load responsive tension adjuster		gap with pulley
	or shifter	132	.Gravity actuated guide roll for
110	.Tension adjuster or shifter		tensioning belt
	driven by electrical or fluid	133	.Guide roll mounted for movement
	motor		of its axis along arcuate path
111	.Tension adjuster has surface in		to tension belt
	sliding contact with belt	134	Plural guide rolls engaging
112	.Pulley or guide roll has		single belt
	eccentric mount for shifting	135	Guide roll spring biased in
	or tensioning movement		belt-tensioning direction
113	.Pulley shifter	136	.Guide roll mounted for movement
114	Pulley on shaft of adjustably		of its axis along rectilineal
	mounted drive motor		path to tension belt
115	Spring biased in belt-	137	Plural guide rolls engaging
	tensioning direction		single belt
116	Pulley is vehicle drive pulley	138	Guide roll spring biased in
	(e.g., bicycle sprocket, etc.)		belt-tensioning direction
117	Spring biased in belt-	139	PULLEY ENGAGES EXTERIOR SURFACE
	tensioning direction		OF BELT
118	Pulley shiftable into	140	BELT GUIDE HAS SURFACE IN SLIDING
	engagement with exterior of		CONTACT WITH BELT
	belt surface		

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141	PULLEY HAVING CIRCUMFERENTIALLY SPACED PORTIONS OF DRIVE FACE SPACED UNEQUAL DISTANCES FROM PULLEY AXIS OF ROTATION (E.G., ELLIPTICAL PULLEY, ETC.)
142	MAGNETIC ATTRACTION BETWEEN BELT AND PULLEY
143	FABRIC DRIVE FACE ON BELT AND PULLEY
144	GUARD OR HOUSING FOR BELT OR PULLEY
145	.Connected to belt
146	.Extending along entire length of belt run
147	Individual tubular housings for
1/18	SYSTEM INCLUDING SDACED DULLEYS
140	TIMPECONNECTED BY & BELT
149	Positive drive pulley and friction drive pulley connected by same belt
150	.With frame or mount for system
151	AUXILIARY MEMBER REMOVABLY
101	ATTACHED TO PULLEY OR GUIDE
	POLL FOR REFVENTING LATERAL
	DISDLACEMENT OF BELT
150	DISPLACEMENT OF BEDI
TJZ	POSITIVE DRIVE PULLEI OR GOIDE
1 = 0	ROLL
153	.With particular belt
154	Belt has spherical or
	hemispherical drive faces
155	Belt formed of rigid links
156	With sequential links pivoted about discrete pivot pin
157	And each link has integral
	surfaces forming inwardly
	opening groove
158	.And additional coaxial surface
	for engaging same belt in
	shifted condition or for
	engaging auxiliary belt,
	brake, or clutch member
159	Coaxial surface is belt-
	engaging surface on friction
	drive pulley
160	Coaxial surface is belt-
	engaging surface on positive drive pulley of different circumference
161	Uning nonmotallia component
101	Having hold and a f
трү	.Having belt-engaging surfaces on
	discrete circumferentially spaced, relatively movable or replaceable members

163	Movable with respect to each
164	.Having axially spaced sets of belt-engaging surfaces
165	.With stationary support for pulley or guide roll
166	FRICTION DRIVE PULLEY OR GUIDE ROLL
167	.With particular belt
168	.Including plural, coaxial,
	grooves
169	Plural grooves of different circumferences
170	Plural grooves formed in unitary member
171	And additional coaxial surface for engaging same belt in shifted condition or for
170	engaging auxiliary belt, brake, or clutch member
1/2	.Guide roll on axis perpendicular to top surface of belt for
170	engaging side of bert
1/3	engaging top or bottom surface of belt
174	.Pulley or guide roll including circumferential belt-receiving groove
175	Groove formed by rugate or circumferentially spaced drive
176	Groove formed by multiple, abutting, circumferentially
	connected members
177	And circumferentially continuous belt-engaging layer
	or insert of diverse material added on or between groove- forming flanges
178	Layer or insert of resilient material
179	Including connected discrete axially spaced groove-forming
180	flanges Connected via nesting
	cylindrical or conical surfaces integral with the flanges
181	And abutting radial surfaces integral with the flanges
182	Including connector extending through opening in abutting surfaces

183	Connector comprises tang integral with one of the surfaces	208	Including wire member coiled about pivotal axis between links
184	.Pulley or guide roll having plural, discrete belt-engaging faces for engaging flat belt	209	Including ball or roller bearing circumferentially spaced about pivotal axis
185	Circumferentially spaced faces	010	between links
186	And axially spaced faces	210	Links pivotable about diverse
187	Each face has continuous circumferential periphery		axes during operation (e.g., "universal" connection
188	.Including grooves or openings in cylindrical belt-engaging surface (e.g., for escape of air etc.)	211 212	facilitating alignment with sprockets in diverse planes) Ball-and-socket connection Link including integral
189	Circumferentially extending grooves		surfaces forming inwardly opening groove (e.g., silent
190	.Including nonmetallic belt-	0.1.0	chain, etc.)
191	engaging surface portionRubber	213	Plural links having laterally aligned groove-forming
192	With embedded metal layer		surfaces
193	Leather	214	Connector or bearing member
194	Wood or paper		extending through or
195	.With spokes connecting rim to hub		positioned in laterally aligned openings in adjacent
196	Plural spoke sets axially spaced	015	transverse cross section
197	.Cylindrical rim interconnected to axially spaced support members	215	Multiple connector or bearing members extend through or positioned in common opening
198	.With stationary support for pulley or guide roll	216	Concave surface of one
199	And ball or roller bearing for mounting pulley or guide roll on support		abuts convex surface of another connector or bearing members
200	MOBIUS BELT	217	Plural connector or
201	BELT HAVING DRIVE SURFACES ON OPPOSITE SIDE EDGES OF STACKED PLATES HAVING PLANAR FACES PERPENDICULAR TO DIRECTION OF		bearing members with concave surface abut convex surface or surfaces on another connector
	BELT MOVEMENT	010	or bearing member
202	POSITIVE DRIVE BELT	210	Including diverse member for
203	.Drive surfaces on belt formed by spherical or hemispherical		to complete loop (e.g., repair link for broken chain, etc.)
	elements	219	Including separate locking
204	.Drive surfaces on belt formed in or interconnected by continuous flexible member		member for retaining link- connector in laterally aligned openings through adjacent
205	Drive surfaces on		links
	longitudinally spaced teeth formed integral with flexible member	220	Common locking member retains longitudinally spaced
206 207	.Belt formed of rigid linksIncluding nonmetallic part	221	(e.g., wire, etc.)
		222	Threaded connection between

2 ... Threaded connection between connector and locking member

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223	Locking member received in	241	Forming imbricate structure
	annular groove extending	242	Belt has oppositely facing side
	entirely around circumference		drive surfaces (e.g., "V-
	of connector		belt", etc.)
224	Locking member includes	243	Surfaces on ball or roller
	portion disposed within		elements
	opening which receives	211	Oppositely facing surfaces are
	connector	244	on pair of discroto olomonts
225	Locking member extends	245	and accurately price enements
225	through all aligned openings	245	And sequential pairs are
226	Link including diagrate members		interconnected longitudinally
220		0.4.6	by distinct pivot elements
	forming faterally spaced sides	246	Plural, inwardly facing drive
222	Viele sector and sector pulley cooling		surfaces along the direction
221	With particular structure		transverse to longitudinal
	facilitating disassembly of		extent of belt
	adjacent links	247	And plural, inwardly facing
228	With discrete connector		drive surfaces along the
	extending through laterally		direction parallel to
	aligned apertures in adjacent		longitudinal extent of belt
	links	248	.Including link-chain coextensive
229	Connector has bearing surface		with continuous surface belt
	which is noncircular in	249	.Including groove, openings or
	transverse cross section		pockets formed in belt surface
230	Connector connects sequential		and arranged along entire
	links each having discrete		length of belt (e.g., for
	members forming laterally		flexibility, air escape, etc.)
	spaced sides	250	Grooves transversely extending
231	With sleeve rotatable with		on belt surface
	respect to each link for	251	And additional groove on
	engaging pulley tooth		opposite surface
232	Link including common member	252	Groove continuous and
	forming laterally spaced sides	-	longitudinally extending
	of opening for pulley tooth	253	.Including particular means
233	With discrete member	200	connecting opposite ends to
	interconnecting sequential		form loop
	pulley-tooth-receiving links	254	Connected by adhering surface
234	Connector member inserted	234	on one and to surface on other
	through lateral opening in		ond (o g by adhoging host
	pullev-tooth-receiving links		coal ota)
235		255	Including diggrate connector
	opening for pulley tooth on	200	
	all sides	230	Connector comprises element
236	Momber formed from sheet		inserted into longitudinal
200	motal	0.5.7	openings in belt ends
727		257	Connector comprises plate
237	FRICTION DRIVE BELT		clamped externally of belt
238	Including plural interconnected	0 - 0	ends
	and transversely spaced pairs	258	Connector comprises cord sewn
	of oppositely facing side-		through belt ends
	drive surfaces (e.g., plural	259	.Drive surface on single sheet or
	"V-belts", etc.)		web wound in plural,
239	.Having drive surface on		completely overlying
0.4.0	helically coiled wire or cord		convolutions
240	.Including plural interconnected	260	.Including embedded elongated
	members each having a drive		strand having multiple
	surface facing in a common		components or layers of
	direction		diverse materials

261	.Including plural superposed layers each having strands particularly oriented relative
262	Strands in the layers are oblique to longitudinal run of belt (e.g., plural layers of bias fabric, etc.)
263	.Including discrete embedded fibers
264	.Including plural layers of different elastomeric materials
265	<pre>.Having trapezoidal cross section (e.g., "V-belt", etc.)</pre>
266	.Including fabric web (e.g., knit, woven, etc.)
267	Fabric having particular knit or weave
268	And additional coating, layer, or reinforcement of diverse kind of material
269	Additional material is leather
270	Additional material is metal
271	Additional material is rubber
272	.Including metallic drive face
273	MISCELLANEOUS

CROSS-REFERENCE ART COLLECTIONS

900	PHASE VARIATOR
901	PULLEY OR GUIDE ROLL FOR TRACK OF
	ENDLESS TRACK VEHICLE
902	PARTICULAR CONNECTION BETWEEN RIM
	AND HUB
903	PARTICULAR CONNECTION BETWEEN HUB
	AND SHAFT

FOREIGN ART COLLECTIONS

FOR 000 CLASS-RELATED FOREIGN DOCUMENTS

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