This Cla	ss 546 is considered to be an	9	The metal is bonded directly to halogen in the anion
integral part of Class 260 (see the Class 260 schedule for the position of this		10	Polycyclo ring system having the six-membered hetero ring
Class in	schedule hierarchy). This Class		as one of the cyclos
retains	all pertinent definitions and	11	Piperidine containing
class li	nes of Class 260.	12	Azide or acyclic nitrogen
			containing
		13	Boron containing
		14	Silicon containing
	ORGANIC COMPOUNDS (CLASS 532,	15	Spiro
	SUBCLASS 1)	16	The spiro includes the six-
	.HETEROCYCLIC CARBON COMPOUNDS		membered hetero ring
	CONTAINING A HETERO RING	17	Polycyclo ring system having
	HAVING CHALCOGEN (I.E.,		one of the two rings which
	OXYGEN, SULFUR, SELENIUM, OR		form the spiro as one of the
	TELLURIUM) OR NITROGEN AS THE	1.0	cyclos
	ONLY RING HETERO ATOMS (Class	18	Polycyclo ring system
-	540, subclass 1)		having the six-membered hetero
1	Hetero ring is six-membered	1.0	ring as one of the cyclos
	consisting of one nitrogen and	19	At least three ring hetero
2	five carbons		atoms in the two rings which
2	Heavy metal or aluminum	20	form the spiro
2	containing	20	At least three ring
3 4	Arsenic containing		nitrogens in the two rings which form the spiro
4	The metal bonded directly to carbon, which carbon is a ring	21	Phosphorus attached directly
	carbon of the six-membered	21	to the six-membered hetero
	hetero ring or which carbon is		ring by nonionic bonding
	attached directly or	22	Phosphorus attached indirectly
	indirectly to the six-membered	22	to the six-membered hetero
	hetero ring by nonionic		ring by nonionic bonding
	bonding	23	Polycyclo ring system having
5	The metal is bonded directly	23	the six-membered hetero ring
	to chalcogen of a -C(=X)X-		as one of the cyclos
	group, wherein the X's are the	24	Chalcogen bonded directly to
	same or diverse chalcogens,		ring carbon of the six-
	which group is attached		membered hetero ring
	directly or indirectly to the	25	The phosphorus is bonded
	six-membered hetero ring by		directly to the chalcogen
_	nonionic bonding	26	Polycyclo ring system having
6	The metal is bonded directly		the six-membered hetero ring
	to chalcogen which chalcogen		as one of the cyclos
	is attached directly or	27	The polycyclo ring system has
	indirectly to the six-membered		at least ten cyclos and at
	hetero ring by nonionic bonding		least four ring nitrogens
7	The chalcogen is bonded	28	Nonacyclo ring system having
/	directly to ring carbon of a		the six-membered hetero ring
	quinoline ring system		as one of the cyclos
	(including hydrogenated)	29	The six-membered hetero ring
8	The metal is in an anion and		shares ring nitrogen with a
~	the six-membered hetero ring		five-membered cyclo which
	is in a cation		contains additional ring
			nitrogen

30	<pre>Octacyclo ring system having the six-membered hetero ring as one of the cyclos</pre>	46	A single chalcogen is bonded directly to ring carbon of the pentacyclo ring system
31	Plural ring hetero atoms in the octacyclo ring system	47	<pre>(e.g., desoxy morphine, etc.)Plural ring hetero atoms in</pre>
	(e.g., flavanthrone,	4.0	the pentacyclo ring system
32	cepharanthrine, etc.)At least four ring	48	Three or more ring hetero atoms in the pentacyclo ring
	nitrogens in the octacyclo		system
	ring system (e.g.,	49	Two ring nitrogens in the
	<pre>naphthoylene dibenzimidazole, etc.)</pre>		<pre>pentacyclo ring system (e.g., quinacridones, etc.)</pre>
33	Heptacyclo ring system having	50	Ring nitrogen is shared by
	the six-membered hetero ring		two of the cyclos (e.g.,
	as one of the cyclos		yohimbanes, etc.)
34	Two of the cyclos share at	51	Ring nitrogen is shared
	least three ring members		by five-membered cyclo and
35	(e.g., protoveratrine, etc.)At least three ring hetero		<pre>six-membered cyclo (e.g., vincamine, etc.)</pre>
33	atoms in the heptacyclo ring	52	
	system	32	in the five-membered cyclo
36	Plural ring hetero atoms in	53	
2.17	the heptacyclo ring system		is chalcogen, bonded directly
37	Ring carbon is shared by		to ring carbon of the
	three of the cyclos (e.g., perylene tetracarboxylic acid		pentacyclo ring system and also bonded directly to
	diimide, etc.)		chalcogen or nitrogen
38	Hexacyclo ring system having	54	Plural chalcogens bonded
	the six-membered hetero ring		directly to the same cyclo as
	as one of the cyclos		is the $-(C=X)-$ group
39	Two of the cyclos share at	55	Trialkoxybenzoyl bonded
	least three ring members		directly to at least one of
4.0	(e.g., etheno morphides, etc.)		the chalcogens (e.g.,
40	Plural ring nitrogens in	56	reserpine, etc.)Three or more ring carbons
	<pre>the hexacyclo ring system (e.g., reserpic acid lactone,</pre>	30	of the pentacyclo ring system
	etc.)		are substituted (e.g.,
41	Plural ring hetero atoms in		substituted quinacridones,
	the hexacyclo ring system		etc.)
42	Pentacyclo ring system having	57	Three or more chalcogens
	the six-membered hetero ring		containing
	as one of the cyclos	58	The pentacyclo ring system
43	Two of the cyclos share at		consists of five six-membered
	least three ring members		cyclos (e.g., anthraquinonebenzacridones,
44	<pre>(i.e., bridged)One of the five cyclos is</pre>		etc.)
11	five-membered and includes	59	Nitrogen attached directly
	ring chalcogen (e.g., codeine,		to the pentacyclo ring system
<i>1</i> E	morphine, etc.)	60	by nonionic bondingAn additional ring is
45	Nitrogen or divalent chalcogen double bonded	00	bonded directly to the
	directly to carbocyclic ring		nitrogen
	of the pentacyclo ring system	61	Tetracyclo ring system having
	(e.g., morphinones, etc.)		the six-membered hetero ring
			as one of the cyclos

62	Plural ring hetero atoms in the tetracyclo ring system	78	Plural chalcogens bonded directly to carbocyclic rings
63	<pre>(e.g., acronycines, etc.)Two of the cyclos share at least three ring member (i.e.,</pre>	70	of the tetracyclo ring system (e.g., pyridoanthraquinones, etc.)
64	<pre>bridged)Three or more ring hetero atoms in the tetracyclo ring</pre>	79	<pre>Tricyclo ring system having the six-membered hetero ring as one of the cyclos</pre>
65	systemPlural ring chalcogens in	80	<pre>Plural ring hetero atoms in the tricyclo ring system</pre>
66	the tetracyclo ring systemRing carbon is shared by	81	Plural ring nitrogens in the tricyclo ring system
67	three of the cyclosThe three cyclos consist	82	Three or more ring hetero atoms in the tricyclo ring
	of two carbocyclic rings and a five-membered hetero ring	83	<pre>systemAt least one of the ring</pre>
	<pre>which includes a ring nitrogen (e.g., ergolines, etc.)</pre>	84	hetero atoms is chalcogenOne of the cyclos is five-
68	Chalcogen or nitrogen		membered
	bonded directly to ring carbon of the six-membered hetero ring	85	<pre>The six-membered hetero ring shares ring members with the five-membered cyclo only</pre>
69	<pre>is chalcogen, bonded directly to the six-membered hetero ring (e.g., lysergic acid,</pre>	86	<pre>(e.g., pyrido-indoles, etc.)Chalcogen bonded directly to ring carbon of the tricyclo ring system</pre>
	etc.)	87	Nitrogen attached
70 71	Two ring nitrogens in the tetracyclo ring systemRing nitrogen is shared by		directly or indirectly to the tricyclo ring system by nonionic bonding
72	two of the cyclosTwo of the cyclos share at	88	Phenanthrolines (including hydrogenated)
7.2	least three ring members or a ring carbon is shared by three	89	Ring oxygen in the tricyclo ring system
	of the cyclos (i.e., bridged or peri-fused)	90	Plural ring oxygens in the tricyclo ring system
73	The six-membered hetero ring shares ring members with	91	Tropane and oxirane in the tricyclo ring system
	<pre>one other cyclo only (e.g., pyrrocolines, etc.)</pre>	92	Plural chalcogens bonded directly to ring carbons of
74	Two of the cyclos share at least three ring members	0.3	the tricyclo ring system
	(e.g., morphinans, etc.)	93	<pre>One of the cyclos has at least seven members</pre>
75	<pre>Ring carbon is shared by three of the cyclos</pre>	94	<pre>Ring nitrogen is shared by two of the cyclos</pre>
76	Chalcogen bonded directly to ring carbon of the six-	95	Benzo(a)quinolizines (including hydrogenated)
	membered hetero ring (e.g., anthrapyridones, etc.)	96	Additional polycyclo ring system having ring nitrogen
77	The six-membered hetero ring shares ring members with one other cyclo only	97	<pre>(e.g., emetine, etc.)Two of the cyclos share at least three ring carbons (e.g., benzomorphans, etc.)</pre>

98	Ring carbon is shared by	112	Bicyclo ring system having
	<pre>each of the three cyclos (e.g., 1,8 naphthalimides,</pre>		the six-membered hetero ring as one of the cyclos
99	etc.)Nitrogen, other than as	113	Plural ring hetero atoms in the bicyclo ring system
	nitro or nitroso, attached directly or indirectly to the	114	Ring sulfur in the bicyclo ring system
	tricyclo ring system by nonionic bonding	115	Ring oxygen in the bicyclo ring system
100	The nitrogen is bonded directly to a carbocyclic ring of the tricyclo ring system	116	Acyclic chalcogen bonded directly to ring carbon of the bicyclo ring system
101	<pre>Each of the three cyclos is six-membered (e.g., benzoquinolines, etc.)</pre>	117	At least four ring nitrogens in the bicyclo ring system
102	Acridines (including hydrogenated)	118	Three ring nitrogens in the bicyclo ring system
103	Chalcogen bonded directly to ring carbon of the six-membered hetero ring	119	Two of the ring nitrogens are bonded directly to each other
104	<pre>Nitrogen, other than as nitro or nitroso, attached directly or indirectly to the</pre>	120	Having -C(=X)-, wherein X is chalcogen, bonded directly to the bicyclo ring system
	acridine ring system by nonionic bonding	121	Ring nitrogen is shared by the two cyclos
105	The nitrogen is bonded directly to ring carbon of the six-membered hetero ring	122	The other cyclo in the bicyclo ring system is also six-membered (e.g.,
106	The nitrogen is part of a substituent which contains additional nonionically bonded nitrogen	123	<pre>naphthyridines, etc.)Chalcogen and -C(=X)-, wherein X is chalcogen, bonded</pre>
107	Plural nitrogens, other than as nitro or nitroso, attached directly to the		directly to ring carbons of the bicyclo ring system (e.g., 4-oxo-naphthyridine -3-carboxylic acid, etc.)
	carbocyclic rings of the acridine ring system (e.g.,	124	Tropanes (including nor and dehydro forms)
108	3,6-diaminoacridines, etc.)Phenanthridines (including	125	Additional hetero ring containing
109	hydrogenated)Unsaturated ring bonded directly to ring carbon of the six-membered hetero ring	126	<pre>Additional polycyclo ring system having the additional hetero ring as one of the cyclos</pre>
110	<pre>Chalcogen or -C(=X)-, wherein X is chalcogen, attached directly to the six</pre>	127	Chalcogen bonded directly to ring carbon of the tropane ring system
	membered hetero ring by nonionic bonding	128	Polycyclo-carbocyclic ring system
111	The tricyclo ring system consists of a five-membered carbocyclic ring ortho fused to both a six-membered	129	Additional chalcogen attached directly or indirectly to the tropane ring system by nonionic bonding
	carbocyclic ring and the six- membered hetero ring (e.g., indenopyridines, etc.)	130	Three or more oxygens attached directly or indirectly to the tropane ring system by nonionic bonding

131		147	The -C(=X)- is part of a - C(=X)X- group, wherein the X's are the same or diverse chalcogens
132	<pre>containing)Having -C(=X)-, wherein X is chalcogen, bonded directly to the tropane ring system</pre>	148	Unsaturated hetero ring attached indirectly to the isoquinoline ring system by nonionic bonding
133	Quinuclidines (including unsaturated)	149	Unsaturated carbocyclic ring attached indirectly to
134	Quinoline containing (including hydrogenated)		the six-membered hetero ring through an acyclic hydrocarbon chain
135	Additional hetero ring containing	150	Single bond between 3,4-
136	Three or more chalcogens attached indirectly to the quinuclidine ring system by nonionic bonding	151	<pre>positionsN-alkyl or N-alkenyl isoquinoliniums which are otherwise unsubstituted or</pre>
137	<pre>Chalcogen bonded directly to ring carbon of the</pre>		alkyl or alkenyl substituted only
138	quinuclidine ring systemQuinolizines (including	152	<pre>Quinolines (including hydrogenated)</pre>
139	hydrogenated)Isoquinolines (including	153	Chalcogen attached directly to the six-membered hetero
140	hydrogenated)Plural isoquinoline ring	154	ring by nonionic bondingPolycyclo-carbocyclic ring
	systems attached directly or indirectly to each other by nonionic bonding		<pre>system bonded directly to the six-membered hetero ring (e.g., quinophthalones, etc.)</pre>
141	Chalcogen attached directly to the six-membered hetero ring by nonionic bonding	155	Plural chalcogens attached directly to the six-membered hetero ring by nonionic
142	Plural chalcogens attached directly to the six-membered hetero ring by nonionic bonding	156	bondingHaving -C(=X)-, wherein X is chalcogen, bonded directly to the six-membered hetero
143	Nitrogen, other than as nitro or nitroso, attached directly to the isoquinoline ring system by nonionic	157	ringChalcogen attached directly at 2-position by nonionic bonding
1 4 4	bonding	158	Single bond between 3,4- positions
144	Unsaturated ring attached directly to the six-membered hetero ring by nonionic bonding	159	Nitrogen, other than as nitro or nitroso, attached directly to the six membered
145	Acyclic nitrogen double or triple bonded to carbon which		hetero ring by nonionic bonding
	is attached directly or indirectly to the isoquinoline ring system by nonionic	160	Unsaturated carbocyclic ring bonded directly to the nitrogen
146	<pre>bondingHaving -C(=X)-, wherein X is chalcogen, attached</pre>	161	<pre>Having -C(=X)-, wherein X is chalcogen, bonded directly to the carbocyclic ring</pre>
	directly or indirectly to the isoquinoline ring system by nonionic bonding		

162	<pre>Nitrogen attached indirectly to the six-membered hetero ring through the directly attached nitrogen by</pre>	177	<pre>Chalcogen attached directly to the carbocyclic ring of the quinoline ring system by nonionic bonding</pre>
	nonionic bonding	178	Chalcogen attached directly
163	Both nitrogens bonded	1,0	to the carbocyclic ring of the
103			
	directly to the same acyclic		quinoline ring system by
	hydrocarbon group		nonionic bonding
164	Fully saturated quinolines	179	\dots The chalcogen is in an -
165	Single bond between 1,2-		OH, -SH, -OM or -SM group (M is
	positions and single bond		Group IA or Group IIA light
	between 3,4-positions		metal)
166		180	Halogen or nitro attached
100	The six-membered hetero	100	_
	ring is unsubstituted or alkyl		directly or indirectly to the
	substituted only		quinoline ring system by
167	Unsaturated hetero ring		nonionic bonding
	attached directly to the	181	Quinolines which are
	quinoline ring system by		unsubstituted or which are
	nonionic bonding		alkyl or alkenyl substituted
168	Having -C(=X)-, wherein X		only, or salt thereof
100	is chalcogen, bonded directly	182	Addition salts
	<i>3 '</i>		
	to the quinoline ring system	183	Chalcogen bonded directly to
169	Acyclic nitrogen bonded		ring carbon of the bicyclo
	directly to the $-C(=X)-$ group		ring system
170	\dots The -C(=X)- is part of a -	184	Piperidines
	C(=X)X- group, wherein the X's	185	Process of forming a
	are the same or diverse		piperidine ring from a
	chalcogens		pyridine ring or from a
171	Nitrogen, other than as		partially hydrogenated
 			pyridine ring
	nitro or nitroso, attached	106	
	directly to the carbocyclic	186	Plural piperidine rings
	ring of the quinoline ring	187	Additional hetero ring
	system by nonionic bonding		containing
172	Acyclic sulfur bonded	188	Chalcogen attached directly
	directly to oxygen and		to a ring carbon of a
	directly or indirectly to the		piperidine ring by nonionic
	quinoline ring system by		bonding
	nonionic bonding	189	Having $-C(=X)-$, wherein X is
173	Unsaturated carbocyclic	207	chalcogen, bonded directly to
1,3	ring attached directly to the		
	quinoline ring system by	190	a piperidine ring
		190	Having -C(=X)-, wherein X is
	nonionic bonding (e.g.,		chalcogen, attached indirectly
	quinophthalones, etc.)		to a piperdine ring by
174	Having $-C(=X)-$, wherein X		nonionic bonding
	is chalcogen, attached	191	Carbocyclic ring containing
	indirectly to the quinoline	192	Additional ring containing
	ring system by nonionic	193	Pyridine ring or partially
	bonding		hydrogenated pyridine ring
175	Nitrogen bonded directly	194	Carbocyclic ring containing
	to the -C(=X)- group		
176	Nitrogen, other than as	195	The additional ring is one
1,0	nitro or nitroso, attached		of the cyclos in a polycyclo
	·		ring system
	indirectly to the quinoline	196	\ldots Hetero ring in the
	ring system by nonionic		polycyclo ring system
	bonding	197	Plural ring hetero atoms
			in the polycyclo ring system

198	Ring nitrogen in the polycyclo ring system	220	Having -C(=X)-, wherein X is chalcogen, attached
199	Plural ring nitrogens in the polycyclo ring system		directly or indirectly to the piperidine ring by nonionic
200	Ring nitrogen in the polycyclo ring system	221	<pre>bondingHaving -C(=X)-, wherein X</pre>
201	Bicyclo ring system which is indole (including hydrogenated)		is chalogen, attached directly or indirectly to the piperidine ring by nonionic
202	Ring sulfur in the polycyclo ring system	222	bondingThe -C(=X)- group and the
203	The polycyclo ring system is tricyclo-carbocyclic		piperidine ring are bonded directly to the same chalcogen
204	Chalcogen bonded directly to the tricyclo-carbocyclic ring system	223	Nitrogen attached directly to the piperidine ring by nonionic bonding
205	The polycyclo ring system is bicyclo-carbocyclic	224	Acyclic nitrogen bonded directly to a -C(=X)- group,
206	Chalcogen bonded directly to the bicyclo-carbocyclic ring system	225	<pre>wherein X is chalcogenHaving -C(=X)-, wherein X is chalcogen, bonded directly to</pre>
207	The additional ring is a	226	the piperidine ringAt 1-position
208	hetero ringRing nitrogen in the additional hetero ring	227	The -C(=X)- is part of a - C(=X)X- group, wherein the X's
209	Ring sulfur or ring oxygen in the additional hetero ring		are the same or diverse chalcogens
210	Plural ring nitrogens in the additional hetero ring	228	Carbocyclic ring bonded directly at 4-position
211	1,2-diazole (including hydrogenated)	229	Nitrogen attached indirectly to the piperidine ring by nonionic bonding
212	<pre>The additional hetero ring consists of one sulfur and four carbons</pre>	230	Cyano attached indirectly to the piperidine ring by
213	Carbocyclic ring	231	nonionic bondingPlural acyclic nitrogens
214	The additional hetero ring consists of one oxygen and four carbons		bonded directly to the same carbon or single bonded directly to each other
215	Cyano bonded directly to the piperidine ring	232	Chalcogen attached indirectly to the piperidine
216	Chalcogen bonded directly to ring carbon of the piperidine ring	233	<pre>ring by nonionic bondingAcyclic nitrogen bonded directly to a -C(=X)- group,</pre>
217	Chalcogen and a carbocyclic ring bonded directly at 4-	234	<pre>wherein X is chalcogenPlural carbocyclic rings containing</pre>
218	positionThe chalcogen, X, is part	235	The chalcogen, X, is in a -C(=X)- group
	of a -C(=X)X- group, wherein the X's are the same or diverse chalcogens	236	Chalcogen attached indirectly to the piperidine
219	Plural chalcogens bonded directly to ring carbons of the piperidine ring	237	<pre>ring by nonionic bondingThe chalcogen, X, is in a - C(=X)- group</pre>

238	The -C(=X)- is part of a -C(=X)X- group, wherein the X's are the same or diverse chalcogens	257	<pre>Pyridine or partially hydrogenated pyridine rings are bonded directly to each other</pre>
239	Plural carbocyclic rings containing	258	Halogen containing or process utilizing halogen or
240	The chalcogen is in an -OH or -OM group (M is Group IA or Group IIA light metal)	259	halogen containing compoundMetal containing catalyst utilized
241	The -OH or -OM is bonded to an acyclic carbon, which	260	Metal containing catalyst utilized
0.4.0	carbon is bonded directly to two rings	261	Chalcogen bonded directly to ring carbon of pyridine or
242	Chalcogen bonded directly to ring carbon of the piperidine ring	262	partially hydrogenated pyridine ring Having G(-Y) wherein Y is
243	At 2-position	202	Having -C(=X)-, wherein X is chalcogen, bonded directly to
244	Nitrogen attached directly to the piperidine ring by		pyridine or partially hydrogenated pyridine ring
0.45	nonionic bonding	263	The -C(=X)- is part of a -
245	Having -C(=X)-, wherein X is chalcogen, bonded directly to the piperidine ring		<pre>C(=X)X- group, wherein the X's are the same or diverse chalcogens</pre>
246	Nitrogen attached indirectly	264	Acyclic nitrogen attached
	to the piperidine ring by nonionic bonding		directly or indirectly to pyridine or partially
247	Acyclic nitrogen bonded		hydrogenated pyridine ring by
	directly to a $-C(=X)$ - group,	0.65	nonionic bonding
248	wherein X is chalcogenChalcogen attached indirectly	265	Having -C(=X)-, wherein X is chalcogen, bonded directly to
240	to the piperidine ring by		the acyclic nitrogen
	nonionic bonding	266	\ldots Chalcogen attached indirectly
249	Process of forming partially hydrogenated pyridine ring		to pyridine or partially hydrogenated pyridine ring by
250	Process of forming pyridine ring	267	nonionic bondingThe chalcogen, X, is in a -
251	The pyridine ring is		C(=X)- group
	unsubstituted or hydrocarbyl substituted only	268.1	Additional hetero ring containing
252	Starting materials include a	268.4	The additional hetero ring is
	<pre>nitrogen containing hetero ring (e.g., starting materials</pre>		five-membered having two or more ring hetero atoms of
	include a piperidine ring,		which at least one is nitrogen
	etc.)	268.7	Thiadiazoles (including
253	<pre>Starting materials include a hydrocarbon</pre>	269.1	hydrogenated)Oxadiazoles (including
254	Starting materials include an acyclic hydrocarbyl ether	269.4	hydrogenated)0xadiazole ring bonded
	or an acyclic hydrocarbyl alcohol	200.1	directly to the six-membered hetero ring
255	Plural pyridine or partially	269.7	1,3-thiazoles (including
25.6	hydrogenated pyridine rings	270 1	hydrogenated)
256	Additional hetero ring containing	270.1	<pre>Polycyclo ring system having the 1,3-thiazole ring as one of the cyclos</pre>

270.4	1,3-thiazole ring bonded directly to the six-membered hetero ring	276.7	<pre>Polycyclo ring system having the five-membered hetero ring as one of the cyclos</pre>
270.7	Nitrogen attached directly to the 1,3-thiazole ring by nonionic bonding	277.1	Bicyclo ring system which is isoindole (including hydrogenated)
271.1	<pre>1,2-thiazoles (including hydrogenated)</pre>	277.4	Bicyclo ring system which is indole (including
271.4	1,3-oxazoles (including hydrogenated)	277.7	hydrogenated)Chalcogen attached
271.7	Polycyclo ring system having the 1,3-oxazole ring as one of the cyclos		directly to the five-membered hetero ring by nonionic bonding
272.1	<pre>1,2-oxazoles (including hydrogenated)</pre>	278.1	<pre>is chalcogen, bonded directly</pre>
272.4	1,2,4-triazoles (including hydrogenated)		to the five- membered hetero ring
272.7	1,3-diazoles (including hydrogenated)	278.4	Chalcogen attached directly to the five-membered hetero
273.1	<pre>Polycyclo ring system having the 1,3-diazole ring as one of the cyclos</pre>	278.7	ring by nonionic bondingPlural chalcogens attached directly to the five-membered
273.4	Bicyclo ring system which is benzimidazole (including	070 1	hetero ring by nonionic bonding
273.7	hydrogenated)Chalcogen bonded directly to a ring carbon of the 1,3- diazole ring	279.1	<pre>Nitrogen or -C(=X)-, wherein X is chalcogen, attached directly to the five- membered ring by nonionic bonding</pre>
274.1	The 1,3-diazole ring is bonded directly to the six-	279.4	Nicotine, per se, or its salts
274 4	membered hetero ring	279.7	Ring sulfur in the additional hetero ring
274.4	Chalcogen attached directly to the 1,3-diazole ring by nonionic bonding	280.1	The additional hetero ring is six-membered
274.7	Nitrogen or -C(=X)-, wherein X is chalcogen,	280.4	The additional hetero ring is five-membered
	attached directly to the 1,3- diazole diazole ring by	280.7	Plural ring sulfurs in the additional hetero ring
275.1	nonionic bondingChalcogen attached indirectly to the 1,3-diazole	281.1	<pre>Polycyclo ring system having the additional hetero ring as one of the cyclos</pre>
	ring by acyclic nonionic bonding	281.4	Nitrigen attached directly to the six-membered hetero
275.4	1,2-diazoles (including hydrogenated)		ring or to the additional hetero ring by nonionic
275.7	Polycyclo ring system	201 7	bonding
	having the 1,2-diazole ring as one of the cyclos	281.7	hetero ring
276.1	Chalcogen attached directly to the 1,2-diazole ring by	282.1	<pre>The additional hetero ring is six-membered</pre>
276.4	nonionic bondingThe additional hetero ring is	282.4	Plural ring oxygens in the additional hetero ring
2,0.1	five-membered consisting of one nitrogen and four carbons	282.7	Polycyclo ring system having the additional hetero ring as one of the cyclos

000 1		000	
283.1	Chalcogen attached	298	Having -C(=X)-, wherein X is
	directly to the additional		chalcogen, bonded directly to
	hetero ring by nonionic		the six-membered hetero ring
202 4	bonding	299	Plural -C(=X)- groups,
283.4	The additional hetero ring		wherein X is chalcogen, bonded
202 7	is five-membered		directly to the six membered
283.7	Plural ring oxygens in the	200	hetero ring
004 1	additional hetero ring	300	Nitrogen attached indirectly
284.1	Polycyclo ring system		to the six-membered hetero
	having the additional hetero	201	ring by nonionic bonding
0044	ring as one of the cyclos	301	Chalcogen attached indirectly
284.4	Chalcogen attached directly		to the six-membered hetero
	to the additional hetero ring	200	ring by nonionic bonding
	by nonionic bonding	302	Halogen attached directly or
284.7	Nitrogen or -C(=X)-,		indirectly to the six-membered
	wherein X is chalcogen,		hetero ring by nonionic
	attached directly to the	202	bonding
	additional hetero ring by	303	Halogen attached directly or
	nonionic bonding		indirectly to the six-membered
285	Polycyclo-carbocyclic ring		hetero ring by nonionic
	system having at least three	204	bonding
	cyclos	304	Nitrogen attached directly to
286	Cyano bonded directly to the		the six-membered hetero ring
	six-membered hetero ring	205	by nonionic bonding
287	Additional cyano containing	305	Sulfur and acyclic nitrogen
288	Chalcogen bonded directly to		bonded directly to the same
	ring carbon of the six-	206	carbon
	membered hetero ring	306	Plural acyclic nitrogens
289	Nitrogen attached directly to		bonded directly to the same
	the six-membered hetero ring		carbon or single bonded
	by nonionic bonding	207	directly to each other
290	Chalcogen bonded directly to	307	Plural nitrogens attached
	ring carbon of the six-		directly to the six-membered
001	membered hetero ring		hetero ring by nonionic
291	Chalcogen and acyclic	308	bonding
	nitrogen bonded directly to	300	Acyclic nitrogen bonded
	the same carbon		directly to a -C(=X)- group,
292	The chalcogen or the acyclic	200	wherein X is chalcogen
	nitrogen is bonded directly to	309	Acyclic nitrogen bonded directly to a -C(=X)- group,
	the six membered hetero ring		
293	Sulfur bonded directly to	210	wherein X is chalcogen
	acyclic nitrogen	310	Having -C(=X)-, wherein X is
294	Chalcogen bonded directly to		chalcogen, bonded directly to
	chalcogen	211	the six-membered hetero ring
295	Halogen bonded directly to	311	The nitrogen bonded
	the six-membered hetero ring	210	additionally only to hydrogen
	by nonionic bonding	312	Chalcogen attached indirectly
296	Plural chalcogens bonded		to the six-membered hetero
	directly to ring carbons of	212	ring by nonionic bonding
	the six-membered hetero ring	313	Thiocarbonyl bonded directly
297	Nitrogen attached directly to		to the six-membered hetero
	the six-membered hetero ring	21/	ring
	by nonionic bonding	314	Carbonyl bonded directly to
		215	the six-membered hetero ring
		315	At 3-position

316	Acyclic nitrogen bonded directly to the carbonyl	336	Acyclic nitrogen bonded directly to a -C(=X)- group,
317	Processes of obtaining	227	wherein X is chalcogen
0.1.0	nicotinamide per se	337	Additional ring containing
318	The carbonyl is in a -COO-group	338	Acyclic nitrogen bonded directly to chalcogen
319	<pre>Processes of obtaining nicotinic acid per se or a derivative of nicotinic acid wherein the only substituents</pre>	339	<pre>Chalcogen attached indirectly to the six-membered hetero ring by nonionic bonding (e.g., sulfato betaines, etc.)</pre>
	are -COO- groups, or salt thereof	340	The chalcogen, X, is in a - C(=X)- group
320	By oxidation	341	The $-C(=X)$ - is part of a -
321	Additional -COO- group bonded directly to the six-membered hetero ring		<pre>C(=X)X- group, wherein the X's are the same of diverse chalcogens</pre>
322	Carbocyclic ring containing	342	Additional ring containing
323	Acyclic nitrogen bonded	343	The six-membered hetero ring
324	directly to the carbonylAcyclic nitrogen single	0.10	and another ring bonded directly to the same carbon
321	bonded directly to acyclic	344	The chalcogen is in an -OH or
325	nitrogenCarbon double bonded	511	-OM group (M is Group IA or Group IIA light metal)
323		345	Halogen attached directly to
226	directly to one of the acyclic nitrogens	343	the six-membered hetero ring
326	The carbonyl is in a -COO-	246	by nonionic bonding
	group	346	Halogen attached indirectly to
327	Processes		the six-membered hetero ring
328	Acyclic nitrogen attached		by nonionic bonding
329	indirectly to the six-membered hetero ring by nonionic bonding	347	The ring nitrogen of the six- membered hetero ring is pentavalent (e.g., quaternary pyridinium salts, etc.)
349	Nitrogen attached indirectly	348	
330	to the six-membered hetero ring by nonionic bonding	340	Unsubstituted or hydrocarbyl substituted only, or salt thereof
330	Cyano attached indirectly to	240	
	the six-membered hetero ring by nonionic bonding	349	Alkylation or dealkylation process
331	Sulfur and acyclic nitrogen bonded directly to the same	350	Unsaturated hydrocarbyl side chain
	carbon	351	Stabilized alkenyl pyridines
332	Plural acyclic nitrogens bonded directly to the same carbon or single bonded	352	Process of forming the unsaturated hydrocarbyl side chain
	directly to each other	252	
333	The six-membered hetero ring and another ring bonded	353	Purification or recovery
	directly to the same carbon		
334	Chalcogen attached indirectly to the six-membered hetero	FOREIGN	ART COLLECTIONS
335	ring by nonionic bondingThe chalcogen, X, is part of a -C(=X)X- group, wherein the X's are the same or diverse chalcogens	FOR 000	CLASS-RELATED FOREIGN DOCUMENTS