# U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

## **CLASSIFICATION ORDER 1910**

## MAY 3, 2011

### PROJECT C-A435

## The following classification changes will be effected by this order:

	Class	<u>Subclass</u>	Art <u>Unit</u>	Ex'r Search Room
Abolished:	435	6	1634	RND0000A51
Established:	435	6.1, 6.11, 6.12, 6.13, 6.14 – 6.18, 6.19	1634 1637 1636 1634 1641	RND0000A51 RND0000A51 RND0000A51 RND0000A51 RND0000A51

# The following classes are also impacted by this order: 436, 536

## This order includes the following:

- A. CLASSIFICATION MANUAL CHANGES
- B. LISTING OF PRINCIPAL SOURCE OF ESTABLISHED AND DISPOSITION OF ABOLISHED SUBCLASSES
- C. CHANGES TO THE USPC-TO-IPC CONCORDANCE
- D. DEFINITION CHANGES AND NEW OR ADDITIONAL DEFINITIONS

## CLASSIFICATION ORDER 1910

# MAY 3, 2011

## PROJECT C-A435

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1.1	DIFFERENTIATED TISSUE OR ORGAN OTHER THAN BLOOD, PER SE, OR DIFFERENTIATED TISSUE OR ORGAN MAINTAINING; COMPOSITION THEREFOR	6.17	Involving a nucleic acid encoding a receptor, cytokine, hormone, growth factor, ion channel protein, or membrane transporter protein
1.2	.Including perfusion; composition therefor	6.18	Involving a nucleic acid encoding an enzyme
1.3	.Including freezing; composition therefor	6.19	Detecting nucleic acid by specific antibody, protein or
2	MAINTAINING BLOOD OR SPERM IN A PHYSIOLOGICALLY ACTIVE STATE OR COMPOSITIONS THEREOF OR	7.1	ligand-receptor binding assay .Involving antigen-antibody binding, specific binding
	THEREFOR OR METHODS OF IN VITRO BLOOD CELL SEPARATION OR TREATMENT	7.2	protein assay or specific ligand-receptor binding assayInvolving a micro-organism or
3	CONDITION RESPONSIVE CONTROL PROCESS		cell membrane bound antigen or cell membrane bound receptor or cell membrane bound
4	MEASURING OR TESTING PROCESS INVOLVING ENZYMES OR MICRO-	7.21	antibody or microbial lysateAnimal cell
	ORGANISMS; COMPOSITION OR TEST STRIP THEREFORE; PROCESSES OF FORMING SUCH COMPOSITION OR	7.22	Parasite or protozoaTumor cell or cancer cell
_	TEST STRIP	7.24	Leukocyte (e.g., lymphocyte, granulocyte, monocyte, etc.)
5 6.1	.Involving virus or bacteriophage .Involving nucleic acid	7.25 7.3	ErythrocyteFlagellar-antigen or pili-
6.11	Nucleic acid based assay involving a hybridization step with a nucleic acid probe,	7.31	antigenFungi (e.g., yeast, mold,
	involving a single nucleotide polymorphism (SNP), involving	7.32	etc.)Bacteria or actinomycetales
	pharmacogenetics, involving genotyping, involving	7.33 7.34	Staphylococcus
	haplotyping, or involving detection of DNA methylation	7.35 7.36	Salmonella Sexually transmitted disease
6.12	gene expressionWith significant amplification step (e.g., polymerase chain	E 3E	(e.g., chlamydia, syphilis, gonorrhea, etc.)
6.13	reaction (PCR), etc.)Drug or compound screening	7.37 7.4	<ul><li>Escherichia coli</li><li>To identify an enzyme or isoenzyme</li></ul>
6.14	involving gene expressionDetecting cancer	7.5 7.6	Involving avidin-biotin bindingInvolving a modified enzyme
6.15	Involving bacterium, fungus, parasite or protozoan (e.g., detecting pathogen virulence		<pre>(e.g., abzyme, recombinant, chemically altered, etc.)</pre>
	<pre>factors, adhesions, toxins, etc.)</pre>	7.7	Assay in which a label present is an apoenzyme, prosthetic group, or enzyme cofactor
6.16	Involving a nucleic acid encoding a protein related to the nervous system, (e.g., nerve related factors, brain-	7.71	Assay in which a label present is an enzyme inhibitor or functions to alter enzyme activity
	derived cytokines, nerve cell biomarker, etc.)	7.72	Assay in which a label present is an enzyme substrate or substrate analogue

7.8	Involving nonmembrane bound receptor binding or protein binding other than antigen-	34	Determining presence or kind of micro-organism; use of selective media
	antibody binding	35	Using radioactive material
7.9	Assay in which an enzyme	36	Streptococcus; staphylococcus
	present is a label	37	Nitrate to nitrite reducing
7.91	Enzyme produces product which	0.	bacteria
	is part of another reaction	38	Enterobacteria
	system (e.g., cyclic reaction,	39	Ouantitative determination
	cascade reaction, etc.)	40	Using multifield media
7.92	Heterogeneous or solid phase	40.5	.Involving fixed or stabilized,
	assay system (e.g., ELISA, etc.)	40.5	nonliving microorganism, cell, or tissue (e.g., processes of
7.93	Competitive assay		staining, stabilizing,
7.94	Sandwich assay		dehydrating, etc.;
7.95	Indirect assay		compositions used therefore,
8	.Involving luciferase		etc.)
9	.Geomicrobiological testing	40.51	Involving a monolayer, smear or
	(e.g., for petroleum, etc.)		suspension of microorganisms
10	.Involving uric acid		or cells
11	.Involving cholesterol	40.52	Involving tissue sections
12	.Involving urea or urease	41	MICRO-ORGANISM, TISSUE CELL
13	.Involving blood clotting factor		CULTURE OR ENZYME USING
	(e.g., involving thrombin,		PROCESS TO SYNTHESIZE A
	thromboplastin, fibrinogen,		DESIRED CHEMICAL COMPOUND OR
	etc.)		COMPOSITION
14	.Involving glucose or galactose	42	.Process involving micro-
15	.Involving transferase		organisms of different genera
16	Involving transaminase		in the same process,
17	Involving creatine	43	simultaneously
	phosphokinase	43	.Preparing compound having a 1- thia-4-aza-bicyclo (3.2.0)
18	.Involving hydrolase		heptane ring system (e.g.,
19	Involving esterase		penicillin, etc.)
20	Involving cholinesterase	44	By desacylation of the
21	Involving phosphatase	<b>11</b>	substituent in 6-position
22	Involving amylase	45	By acylation of the substituent
23	Involving proteinase	13	in 6-position
24	Involving peptidase	46	In presence of phenyl acetic
25	.Involving oxidoreductase	10	acid or phenyl acetamide or
26	Involving dehydrogenase		their derivatives
27	Involving catalase	47	.Preparing compound having a 1-
28	Involving peroxidase		thia-5-aza-bicyclo (4.2.0)
29	.Involving viable micro-organism		octane ring system (e.g.,
30	Methods of sampling or		cephalosporin, etc.)
	inoculating or spreading a	48	Di-substituted in 7-position
	sample; methods of physically	49	Cephalosporin C
	isolating an intact micro-	50	By acylation of the substituent
2.1	organism		in the 7-position
31	Testing for sterility condition	51	By desacylation of the
32	Testing for antimicrobial		substituent in the 7-position
	activity of a material		
33	Using multifield media		

52	.Preparing compound containing a	70.3	Animal tissue cell culture
	cyclopentanohydrophenanthrene	70.4	Blood (lymphoid) cell culture
	nucleus; nor-, homo-, or D-	70.5	Producing interferons
	ring lactone derivatives thereof	71.1	.Using a micro-organism to make a protein or polypeptide
53	Containing heterocyclic ring	71.2	Procaryotic micro-organism
54	Acting on D-ring	71.2	Antibiotic or toxin
55	Acting at 17-position	_	
56	Hydroxylating at 17-position	72	.Preparing compound containing
57		E 2	saccharide radical
58	Hydroxylating at 16-position	73	Preparing S-glycoside (e.g.,
	Hydroxylating		lincomycin, etc.)
59	At 11-position	74	Preparing O-glycoside (e.g.,
60	At 11 alpha position		glucosides, etc.)
61	Dehydrogenating;	75	Oxygen of the saccharide
	dehydroxylating		radical is directly bonded to
62	Forming an aryl ring from "A"		a nonsaccharide heterocyclic
	ring		ring or a fused- or bridged-
63	.Preparing compound containing a		ring system which contains a
	prostaglandin nucleus		nonsaccharide heterocyclic
64	.Preparing compound other than		ring (e.g., coumermycin,
	saccharide containing a		novobiocin, etc.)
	tetracycline nucleus (e.g.,	76	The hetero ring has eight or
	naphacene, etc.)		more ring members and only
65	.Preparing compound other than		oxygen as ring hetero atoms
	saccharide containing a		(e.g., erythromycin,
	gibberellin nucleus (i.e.,		spiramycin, nystatin, etc.)
	gibbane)	77	Oxygen atom of the saccharide
66	.Preparing compound other than		radical is directly linked
	saccharide containing		through only acyclic carbon
	alloxazine or isoalloxazine		atoms to a nonsaccharide
	nucleus		heterocyclic ring (e.g.,
67	.Preparing compound containing a		bleomycin, phleomycin, etc.)
	carotene nucleus (i.e.,	78	Oxygen atom of the saccharide
	carotene)		radical is directly bonded to
68.1	.Enzymatic production of a		a condensed ring system having
	protein or polypeptide (e.g.,		three or more carboxyclic
	enzymatic hydrolysis, etc.)		rings (e.g., dauomycin,
69.1	.Recombinant DNA technique		adriamycin, etc.)
	included in method of making a	79	Oxygen atom of the saccharide
	protein or polypeptide		radical is bonded to a
69.2	Enzyme inhibitors or activators		cyclohexyl radical (e.g.,
69.3	Antigens	0.0	kasugamycin, etc.)
69.4	Hormones and fragments thereof	80	Cyclohexyl radical is
69.5	Lymphokines or monokines		substituted by two or more
69.51	Interferons		nitrogen atoms (e.g.,
69.52	Interleukins	0.4	destomycin, neamin, etc.)
69.6	Blood proteins	81	Cyclohexyl radical is
69.7	Fusion proteins or polypeptides		attached directly to a
69.8	Signal sequence (e.g., beta-		nitrogen atom of two or more
	galactosidase, etc.)		N-C(=N)-N radicals (e.g.,
69.9	Yeast derived		streptomycin, etc.)
70.1	.Using tissue cell culture to		
	make a protein or polypeptide		
70.2	Fused or hybrid cells		
70.21	Producing monoclonal antibody		
, , , , , ,	I coddcing monocionar ancibody		

82	Having two saccharide radicals bonded through only oxygen to adjacent ring carbons of the cyclohexyl	92	Having a fused ring containing a six-membered ring having two N-atoms in the same ring (e.g., purine based
	radical (e.g., ambutyrosin,		mononucleotides, etc.)
	ribostamycin, etc.)	93	Mashing or wort making
83	Containing three or more	94	Produced by the action of an
	saccharide radicals (e.g., liquidomycin, neomycin, lividomycin, etc.)	<i>J</i>	isomerase (e.g., fructose by the action of xylose isomerase on glucose, etc.)
84	Preparing nitrogen-containing	95	Produced by the action of a
	saccharide	33	beta-amylase (e.g., maltose by
85	N-glycoside		the action of beta-amylase on
86	Cobalamin (i.e., vitamin B12,		amylose, etc.)
	LLD factor)	96	Produced by the action of an
87	Nucleoside	30	exo-1.4 alpha glucosidase
88			(e.g., dextrose by the action
00	Having a fused ring		of glucoamylase on starch,
	containing a six-membered ring		etc.)
	having two N-atoms in the same	97	
	ring (e.g., purine	97	Produced by the action of a
0.0	nucleosides, etc.)		glycosyl transferase (e.g.,
89	Nucleotide		alpha, beta, gamma-
90	Dinucleotide (e.g., NAD,		cyclodextrins by the action of
	etc.)		<pre>glycosyl transferase on starch, etc.)</pre>
91.1	Polynucleotide (e.g.,	0.0	
	nucleic acid, oligonucleotide,	98	Produced by the action of an
	etc.)		alpha-1, 6-glucosidase (e.g.,
91.2	Acellular exponential or		amylose debranched amylopectin
	geometric amplification (e.g.,		by the action of pullulanase,
	PCR, etc.)	0.0	etc.)
91.21	Involving the making of multiple RNA copies	99	Produced by the action of a carbohydrase (e.g., maltose by
91.3	Polynucleotide contains		the action of alpha amylase on
	only ribonucleotide monomers	100	starch, etc.)
91.31	Involving catalytic	100	Disaccharide
	ribonucleic acid	101	Polysaccharide of more than
91.32	Prepared from virus,		five saccharide radicals
	prokaryotic acid		attached to each other by
91.33	Involving virus		glycosidic bonds
91.4	Modification or preparation	102	Pullulan
	of a recombinant DNA vector	103	Dextran
91.41	By insertion or addition	104	Xanthan; i.e., xanthomonas-
	of one or more nucleotides		type heteropolysaccharides
91.42	Involving deletion of a	105	Monosaccharide
J1.42	nucleotide or nucleotides from	106	.Preparing alpha or beta amino
	a vector		acid or substituted amino acid
91.5			or salts thereof
91.5	Acellular preparation of	107	Proline; hydroxyproline;
01 51	polynucleotide		histidine
91.51	Involving RNA as a	108	Tryptophan; tyrosine;
	starting material or		phenylalanine; 3,4
04 50	intermediate		dihydroxyphenylalanine
91.52	Involving a ligase (6.)	109	Aspartic acid (asparaginic
91.53	Involving a hydrolase (3.)		acid); asparagine
		110	Glutamic acid; glutamine

111	Utilizing biotin or its derivatives	133	Containing quinone nucleus (i.e., quinoid structure)
112	<pre>Utilizing surfactant fatty acids or fatty acid esters (i.e., having seven or more atoms)</pre>	134	<pre>Fat; fatty oil; ester-type wax; higher fatty acid (i.e., having at least seven carbon atoms in an unbroken chain</pre>
113	Methionine; cysteine; cystine		bound to a carboxyl group);
114	Citrulline; arginine; ornithine		oxidized oil or fat
115	Lysine; diaminopimelic acid;	135	Carboxylic acid ester
	threonine; valine	136	Containing a carboxyl group
116 117	Alanine; leucine; isoleucine; serine; homoserine .Preparing heterocyclic carbon	137	Sugar acid having five or more carbon atoms (i.e., aldonic, keto-aldonic, or saccharic
11,	compound having only O, N, S,	120	acid)
118	Se, or Te as ring hetero atomsContaining two or more hetero	138	Alpha-ketogulonic acid (i.e., 2-ketogulonic acid)
	rings	139	Lactic acid
119	Containing at least two hetero	140	Acetic acid
	rings bridged or fused among	141	Propionic or butyric acid
	themselves or bridged or fused	142	Polycarboxylic acid
	with a common carbocyclic ring	143	Having keto group (e.g.,
	system, (e.g., rifamycin,	113	alpha-ketoglutaric acid, etc.)
	etc.)	144	Tricarboxylic acid (e.g.,
120	Nitrogen or oxygen hetero atom		citric acid, etc.)
	and at least one other diverse	145	Dicarboxylic acid having four
	hetero ring atom in the same	143	or less carbon atoms (e.g.,
121	ring	4.4.6	fumaric, maleic, etc.)
121	Nitrogen as only ring hetero	146	Hydroxy carboxylic acid
100	atom	147	Containing carbonyl group
122	Containing six-membered hetero	148	Ketone
100	ring	149	Cyclopentanone or
123 124	Containing a hetero ring of at		cyclopentadione containing compound
	least seven ring members	150	Acetone containing product
	<pre>(e.g., zearalenone, macrocyclic lactones, etc.)</pre>	151	Substrate contains grain or cereal material
125	Containing six-membered hetero	152	Substrate contains protein
	ring (e.g., fluorescein, etc.)		as nitrogen source
126	Containing five-membered	153	Substrate contains inorganic
	hetero ring (e.g.,		nitrogen source
	griseofulvin, etc.)	154	Substrate contains inorganic
127	.Preparing compound containing at		compound, other than water
100	least three carbocyclic rings	155	Containing hydroxy group
128	.Preparing nitrogen-containing	156	Aromatic
	organic compound	157	Acyclic
129	Amide (e.g., chloramphenicol,	158	Polyhydric
	etc.)	159	Glycerol
130	.Preparing sulfur-containing	160	Butanol
101	organic compound	161	Ethanol
131	.Preparing organic compound	162	Multiple stages of
	containing a metal or atom		fermentation; multiple types
	other than H, N, C, O, or		of micro-organisms or reuse of
122	halogen		micro-organisms
132	.Preparing oxygen-containing		
	organic compound		

163	<pre>Produced as by-product, or   from waste, or from cellulosic   material substrate</pre>	458	The polynucleotide is coated with or encapsulated within a lipid containing material
164	Substrate contains sulphite waste liquor or citrus waste	459	<pre>(e.g., liposome, etc.)Involving particle-mediated</pre>
165	Substrate contains cellulosic material	133	transfection (i.e., biolistic transfection)
166	.Preparing hydrocarbon	460	Involving laser treatment of
167	Only acyclic		the cell before or during
168	.Preparing element or inorganic		transfection
	compound except carbon dioxide	461	Involving electroporation
169	.Using actinomycetales	462	Involving site-specific
170	.Using bacteria		recombination (e.g., Cre-lox,
171	.Using fungi		etc.)
440	PROCESS OF MUTATION, CELL FUSION,	463	Involving general or homologous
-	OR GENETIC MODIFICATION		recombination (e.g., gene targeting, etc.)
441	.Mutation employing a chemical	464	Involving gene duplication
4.40	mutagenic agent	404	within the cell (e.g.,
442	By replacement of standard		amplification, co-
	nucleic acid base with base		amplification, etc.)
	analog (e.g., 5-bromouracil,	465	Involving co-transfection
4.40	etc.)	466	The polynucleotide is a shuttle
443	By use of intercalating agent	400	vector or a transiently
4.4.4	(e.g., acridine orange, etc.)		replicating hybrid vector
444	By use of alkylating agent	467	Introducing an oncogene to
4.4.5	(e.g., nitrosoguanidine, etc.)	107	establish a cell line
445	By use of oxidative deamination	468	.Introduction of a polynucleotide
	<pre>agent (e.g., nitrous acid, etc.)</pre>	100	molecule into or rearrangement
446	.Mutation employing radiation or electricity		of a nucleic acid within a plant cell
447	X-ray irradiation	469	Introduction via Agrobacterium
448	Ultraviolet irradiation	470	Introduction via
449	.Fusion of cells		electroporation, particle,
450	Employing electric current		fiber or microprojectile
451	One of the fusing cells is a		mediated insertion, or
131	human antibody-producing cell		injection
452	One of the fusing cells is a	471	.Introduction of a polynucleotide
<del>1</del> 02	mouse antibody-producing cell		molecule into or rearrangement
453	One of the fusing cells is a		of nucleic acid within a
<del>1</del> 33	plant cell		microorganism (e.g., bacteria,
454	One of the fusing cells is a		protozoa, bacteriophage, etc.)
131	microorganism (e.g.,	472	The polynucleotide is encapsidated within a
455	prokaryote, fungus, etc.)		bacteriophage, bacteriophage
455	.Introduction of a polynucleotide		coat, or transducing particle
	molecule into or rearrangement of nucleic acid within an	473	The polynucleotide contains a
			transposon
156	animal cell	474	The polynucleotide is a cosmid
456	The polynucleotide is	475	The polynucleotide is
	encapsidated within a virus or viral coat		unencapsidated bacteriophage
157			or viral nucleic acid
457	Helper virus is present	476	The polynucleotide is a plasmid or episome

177	Planet la sur sui nama markaina	172 2	Wallistantian as minung (a.m.
477	Plasmid or episome contains	173.3	.Modification of viruses (e.g.,
	DNA targeting homologous recombination to	173.4	attenuation, etc.) .Cell membrane or cell surface is
	bacteriophage, viral, or	1/3.4	
	chromosomal DNA within a	173.5	target
	microorganism	173.5	Membrane permeability increased
478	Plasmid or episome contains at		Electroporation
470	least part of a gene encoding	173.7	Lytic effect produced (e.g.,
	a restriction endonuclease or		disruption of cell membrane for release of subcellular
	modification enzyme		parts; e.g., nucleic acids,
479	Plasmid or episome confers the		etc.)
	ability to utilize directly a	173.8	.Metabolism of micro-organism
	compound which a wild type	173.0	enhanced (e.g., growth
	microorganism is unable to		enhancement or increased
	utilize		production of microbial
480	Plasmid or episome contains at		product)
	least part of a gene encoding	173.9	.Concentration, separation, or
	a toxin or encoding for		purification of micro-
	virulence or pathogenicity		organisms
481	Plasmid or episome contains a	174	CARRIER-BOUND OR IMMOBILIZED
	gene which complements a		ENZYME OR MICROBIAL CELL;
	nutritional deficiency		CARRIER-BOUND OR IMMOBILIZED
	mutation		CELL; PREPARATION THEREOF
482	Plasmid or episome contains a	175	.Multi-enzyme system
	gene which confers resistance	176	.Enzyme or microbial cell is
	to metal, silicon, selenium,		immobilized on or in an
400	or tellurium toxicity		inorganic carrier
483	Yeast is a host for the	177	.Enzyme or microbial cell is
404	plasmid or episome		immobilized on or in an
484	Mycelial fungus is a host for		organic carrier
405	the plasmid or episome	178	Carrier is carbohydrate
485	Microorganism of the genus	179	Carbohydrate is cellulose or
	Bacillus is a host for the		derivative thereof
486	plasmid or episome	180	Carrier is synthetic polymer
400	Microorganism of the genus	181	Attached to the carrier via a
	Streptomyces is a host for the plasmid or episome		bridging agent
487	Microorganism of the genus	182	Enzyme or microbial cell is
407	Brevibacterium or the genus		entrapped within the carrier
	Corynebacterium is a host for		(e.g., gel, hollow fibre)
	the plasmid or episome	183	ENZYME (E.G., LIGASES (6.),
488	Microorganism of the genus		ETC.), PROENZYME; COMPOSITIONS
100	Escherichia is a host for the		THEREOF; PROCESS FOR
	plasmid or episome		PREPARING, ACTIVATING,
489	Plural nonidentical plasmids		INHIBITING, SEPARATING, OR
103	are introduced into a host	184	PURIFYING ENZYMES
	microorganism or culture	104	.Enzyme inactivation by chemical
	thereof (e.g., plasmid is part	185	treatment .Malt
	of a library, etc.)	186	
490	The polynucleotide is an	186	.Pancreatin
	unbranched linear fragment	TO /	.Preparing granular- or free-
173.1	TREATMENT OF MICRO-ORGANISMS OR	188	flowing enzyme composition
	ENZYMES WITH ELECTRICAL OR	Τ00	Stablizing an enzyme by forming a mixture, an adduct or a
	WAVE ENERGY (E.G., MAGNETISM,		composition, or formation of
	SONIC WAVES, ETC.)		an adduct or enzyme conjugate
173.2	.Enzyme treated		added of only me conjugate

188.5	.Catalytic antibody	213	Trypsin; chymotrypsin
189	.Oxidoreductase (1. ) (e.g.,	214	Thrombin
	luciferase)	215	Urokinase
190	Acting on CHOH group as donor	216	Streptokinase
190			
	(e.g., glucose oxidase,	217	Plasmin (i.e., fibrinolysin)
	lactate dehydrogenase (1.1))	218	Elastase
191	Acting on nitrogen-containing	219	Proteinase
	compound as donor (1.2, 1.5,	220	Derived from bacteria
	1.7)	221	Bacteria is bacillus
192	Acting on hydrogen peroxide as	222	Bacillus subtilus or
	acceptor (1.11)		bacillus lichenoformis
193	.Transferase other than	223	Derived from fungi
	ribonuclease (2.)	_	_
194	Transferring phosphorus	224	From yeast
194		225	From aspergillus
	containing group (e.g.,	226	Derived from animal tissue
	kineases, etc.(2.7))		(e.g., rennin, etc.)
195	.Hydrolase (3. )	227	Acting on carbon to nitrogen
196	Acting on ester bond (3.1)		bond other than peptide bond
197	Carboxylic ester hydrolase		(3.5)
	(3.1.1)	228	Acting on a linear amide
198	Triglyceride splitting (e.g.,	220	linkage in linear amide
230	lipase, etc. (3.1.1.3))	220	_
199	Ribonuclease (3.1.4)	229	Asparaginase
		230	Penicillin amidase
200	Acting on glycosyl compound	231	Acting on amide linkage in
	(3.2)		cyclic amides (e.g.,
201	Acting on alpha-1, 4-		penicillinase, etc.) (3.5.2)
	glucosidic bond, (e.g.,	232	.Lyase (4. )
	hyaluronidase, invertase,	233	.Isomerase (5. )
	amylase, etc. (some 3.2.1))	234	Glucose isomerase
202	Alpha-amylase, microbial	235.1	
-	source	233.1	VIRUS OR BACTERIOPHAGE, EXCEPT
203	Fungal source		FOR VIRAL VECTOR OR
204	Alpha-amylase, plant source		BACTERIOPHAGE VECTOR;
204			COMPOSITION THEREOF;
0.05	(3.2.1.1)		PREPARATION OR PURIFICATION
205	Glucoamylase (3.2.1.3)		THEREOF; PRODUCTION OF VIRAL
206	Acting on beta-1, 4 link		SUBUNITS; MEDIA FOR
	between N-acetylmuramic acid		PROPAGATING
	and 2-acetylamino 2 deoxy-D-	236	.Inactivation or attenuation;
	glucose (e.g., lysozyme, etc.)		producing viral subunits
207	Acting on beta-galatose-	237	By serial passage of virus
	glycoside bond (e.g., beta-	238	By chemical treatment
	galactosidase, etc.)		<del>-</del>
208	Acting on alpha-galatose-	239	.Recovery or purification
200		325	ANIMAL CELL, PER SE (E.G., CELL
	glycoside bond (e.g., alpha-		LINES, ETC.); COMPOSITION
	galactosidase, etc.)		THEREOF; PROCESS OF
209	Acting on beta-1, 4-glucosidic		PROPAGATING, MAINTAINING OR
	bond (e.g., cellulase, etc.		PRESERVING AN ANIMAL CELL OR
	(3.2.1.4))		COMPOSITION THEREOF; PROCESS
210	Acting on alpha-1, 6-		OF ISOLATING OR SEPARATING AN
	glucosidic bond (e.g.,		ANIMAL CELL OR COMPOSITION
	isoamylase, pullulanase, etc.)		THEREOF; PROCESS OF PREPARING
211	Dextranase (3.2.1.11)		A COMPOSITION CONTAINING AN
212			ANTMAL ORLIA CUITMIDE MEDIA
	Acting on peptide bond (e.g.,		ANIMAL CELL; CULTURE MEDIA
	Acting on peptide bond (e.g., thromboplastin, leucine amino-		THEREFORE
	thromboplastin, leucine amino- peptidase, etc., (3.4))		-

326	.Animal cell, per se, expressing immunoglobulin, antibody, or fragment thereof	336	Binds a hormone or other secreted growth regulatory factor, differentiation
327	Immunoglobulin or antibody is anti-idiotypic		factor, intercellular mediator, or neurotransmitter
328	Immunoglobulin or antibody is chimeric, mutated, or a recombined hybrid (e.g., bifunctional, bispecific, rodent-human chimeric, single chain, rFv, immunoglobuin fusion protein, etc.)		(e.g., insulin, human chorionic gonadotropin, intragonadal regulatory protein, Mullerian inhibiting substance, inhibin, epidermal growth factor, nerve growth factor, dopamine,
329	Immunoglobulin or antibody binds an oligosaccharide structure other than nucleic acid	337	norepinephrine, etc.)Binds a plasma protein, serum protein, or fibrin (e.g., clotting factor fibrinolytic
330	<pre>Immunoglobulin or antibody binds an expression product of a cancer related gene or fragment thereof (e.g., oncogene, proto-oncogene, etc.)</pre>	338 339	<pre>factor, complement factor,   immunoglobulin,   apolipoprotein, etc.)Binds an enzymeBinds a virus or component or   product thereof (e.g., virus</pre>
331	Immunoglobulin or antibody binds a specifically identified amino acid sequence	339.1	associated antigen, etc.)Binds a retrovirus or component or product thereof
332	Immunoglobulin or antibody binds a microorganism or normal or mutant component or product thereof (e.g., animal cell, cell surface antigen, secretory product, etc.)	340	<pre>(e.g., HIV, LAV, HTLV, etc.)Binds a bacterium or similar microorganism or component or product thereof (e.g., Streptococcus, Legionella, Mycoplasma, bacterium</pre>
333	Binds a nucleic acid or derivative or component thereof (e.g., DNA, RNA, DNA-RNA, hybrid, nucleotide, nucleoside, carcinogen-DNA adduct, etc.)	341	<pre>associated antigen, exotoxin, etc.)Binds a fungus or plant cell or component or product thereof (e.g., fungus associated antigen, etc.)</pre>
334	Binds a receptor (e.g., transferrin receptor, Fc receptor, dihydropyridine receptor, IL-2 receptor, etc.)	342	Binds a parasitic protozoan or metazoan cell or component or product thereof; (e.g., Dirofilaria, Eimeria,
335	Binds a lymphokine, cytokine, or other secreted growth regulatory factor,		Coccidia, Trichinella, parasite cell surface antigen, etc.)
	differentiation factor, intercellular mediator specific for a hematopoietic cell (e.g., interleukin, interferon, erythropoietin, etc.)	343	Binds a hematopoietic cell or component or product thereof (e.g., erythrocyte, granulocyte, macrophage, monocyte, platelet, myelogenous leukemia cell, bone marrow stem cell, granulocytic cell surface antigen, hemoglobin, thrombospondin, glycophorin, etc.)

343.1	Binds a lymphocytic or	361	Expressing recombinant
	lymphocytic-like cell or		receptor
	component or product thereof	362	Expressing recombinant antigen
	(e.g., B cell, B-lineage bone	363	.Primate cell, per se
	marrow cell, null cell,	364	Monkey kidney
	natural killer cell, B-	365	COS (e.g., COS-7, etc.)
	lymphoblastoid cell, B-	365.1	Expressing recombinant
	lineage, acute lymphoblastic		lymphokine, interferon,
	leukemia cell, B-lymphocytic		hormone, growth factor or
	cell surface antigen, etc.)		morphogen
343.2	Binds a T-lymphocytic cell	366	Human
	or component or product	367	HeLa cell or derivative
	thereof (e.g., T-cell,	368	Nervous system origin or
	thymocyte, T-lineage bone		derivative
	marrow cell, T-lymphoblastoid	369	Renal origin or derivative
	cell, T-lineage acute	370	Hepatic origin or derivative
	lymphoblastic leukemia cell,	371	Epithelial origin or
	T-lymphocytic cell surface	371	derivative
	antigen, etc.)	372	Blood, lymphatic, or bone
344	Binds a cancer cell or	572	marrow origin or derivative
	component or product thereof	372.1	Myeloma origin or derivative
	(e.g., cell surface antigen,	372.2	B-cell or derivative
	etc.)	372.2	T-cell or derivative
344.1	Binds an antigen		
	characterized by name or	373	.Method of co-culturing cells
	molecular weight (e.g., CEA,	374	.Method of storing cells in a
	NCA, CC glycoprotein, melanoma	255	viable state
0.45	gp 150 antigen, etc.)	375	.Method of regulating cell
345	Immunoglobulin or antibody	0.7.6	metabolism or physiology
	binds a drug, hapten, hapten-	376	Method of synchronizing cell
	carrier complex, or		division
	specifically identified	377	Method of altering the
	chemical structure (e.g.,		differentiation state of the
0.4.5	theophylline, digoxin, etc.)		cell
346	.Fused or hybrid cell, per se	378	.Method of detaching cells,
347	.Two or more cell types, per se,		digesting tissue or
	in co-culture		establishing a primary culture
348	.Insect cell, per se	379	Using mechanical means (e.g.,
349	.Avian cell, per se		trituration, etc.)
350	.Canine cell, per se	380	Releasing bound or adhered cell
351	.Feline cell, per se		using protease
352	.Rodent cell, per se	381	Digesting tissue with protease
353	Rat (i.e., Rattus)	382	.Method of culturing encapsulated
354	Mouse (i.e., Mus)		cells
355	Blood or lymphatic origin or	383	.Method of culturing cells in
	derivative		suspension
356	L cell or derivative (e.g.,	384	Culture medium contains a
	Ltk(-), etc.)		growth factor or growth
357	Fibroblast, fibroblast-like		regulator
	cell or derivative (e.g., NIH	385	Medium contains a colony
	3T3, etc.)		stimulating factor
358	Chinese hamster ovary (i.e.,	386	Medium contains an interleukin
-	CHO)	387	Medium contains a polypeptide
359	Expressing recombinant tPA	•	hormone
360	Expressing recombinant hormone	388	Culture medium contains an
	or growth factor		albumin
	or arower raceor		

389	Culture medium contains a transferrin	416	.Sunflower cell or cell line, per se
390	Culture medium contains an	417	.Potato cell or cell line, per se
	incompletely defined plant or	418	.Plant cell or cell line, per se,
	microbial extract excluding		is pest or herbicide resistant
	animal extract		or pest lethal
391	Culture medium contains an	419	.Plant cell or cell line, per se,
	animal extract		contains exogenous or foreign
392	Serum		nucleic acid
393	Using airlift or laminar flow	420	.Culture, maintenance, or
	aeration or foam culture		preservation techniques, per
394	Wherein culture vessel is		se
	rotated or oscillated or	421	Involving protoplast
	culture is agitated	422	Involving conifer cell or
395	.Solid support and method of		tissue (e.g., pine, spruce,
	culturing cells on said solid		fir, cedar, etc.)
	support	423	Involving tomato cell or tissue
396	Support is a resin	424	Involving corn cell or tissue
397	Support is a gel surface	425	Involving tobacco cell or
398	Support is a fiber		tissue
399	Fabric, mat, gauze, or fibrous	426	Involving soybean cell or
	coating		tissue
400	Hollow	427	Involving cotton cell or tissue
401	Support is a membrane	428	Involving sunflower cell or
402	Support is a coated or treated	400	tissue
400	surface	429	Involving potato cell or tissue
403	Support is a suspendable	430	Involving regeneration or
404	particle		propagation into a plant or
404	.Culture medium, per se	120 1	plant part
405	Contains a growth factor or	430.1	Involving callus or embryonic stage
406	growth regulatorContains a polypeptide hormone	431	.Medium, per se, for culture,
407	contains a polypeptide normonecontains an albumin	43 I	maintenance, regeneration,
408	Contains an animal extract		etc.
410	PLANT CELL OR CELL LINE, PER SE	242	SPORE FORMING OR ISOLATING
410	(E.G., TRANSGENIC, MUTANT,		PROCESS
	ETC.); COMPOSITION THEREOF;	243	MICRO-ORGANISM, PER SE (E.G.,
	PROCESS OF PROPAGATING,		PROTOZOA, ETC.); COMPOSITIONS
	MAINTAINING, OR PRESERVING		THEREOF; PROCES OF
	PLANT CELL OR CELL LINE;		PROPAGATING, MAINTAINING OR
	PROCESS OF ISOLATING OR		PRESERVING MICRO-ORGANISMS OR
	SEPARATING A PLANT CELL OR		COMPOSITIONS THEREOF; PROCESS
	CELL LINE; PROCESS OF		OF PREPARING OR ISOLATING A
	REGENERATING PLANT CELLS INTO		COMPOSITION CONTAINING A
	TISSUE, PLANT PART, OR PLANT,		MICRO-ORGANISM; CULTURE MEDIA
	PER SE, WHERE NO GENOTYPIC	244	THEREFOR
	CHANGE OCCURS; MEDIUM	244	.Chemical stimulation of growth
411	THEREFORE .Tomato cell or cell line, per se		or activity by addition of chemical compound which is not
411	.Corn cell or cell line, per se		an essential growth factor;
413	Herbicide resistant		stimulation of growth by
413	.Tobacco cell or cell line, per		removal of a chemical compound
414	se	245	.Adaptation or attenuation of
415	.Soybean cell or cell line, per		cells
	se	246	.Foam culture
	10 P		

247	.Utilizing media containing lower	254.8	Mucor
	alkanol (i.e., having one to	254.9	Rhizopus
	six carbon atoms)	255.1	Yeast
248	.Utilizing media containing	255.2	Saccharomyces
0.40	hydrocarbon	255.21	Culture media, per se, or
249	Aliphatic		technique
250	Having five or less carbon	255.3	Cryptococcus
	atoms	255.4	Candida or torulopsis
251	.Utilizing media containing waste	255.5	Pichia
0.50	sulphite liquor	255.6	Hansenula
252	.Utilizing media containing	255.7	Culture media, per se, or
	cellulose or hydrolysates		technique
050 4	thereof	256.1	Aspergillus
252.1	.Bacteria or actinomycetales;	256.2	Mucor
050	media therefor	256.3	Penicillium
252.2	Rhizobium or agrobacterium	256.4	Cephalosporium or acremonium
252.3	Transformants (e.g.,	256.5	Fusarium
	recombinant DNA or vector or	256.6	Rhizopus
	foreign or exogenous gene	256.7	Trichoderma
	containing, fused bacteria,	256.8	Culture media, per se, or
050 31	etc.)		technique
252.31	Bacillus (e.g., B. subtilis,	257.1	.Algae, media therefor
050 00	B. thuringiensis, etc.)	257.2	Transformants
252.32	Brevibacterium or	257.3	Chlorella
050 33	corynebacterium	257.4	Euglena
252.33	Escherichia (e.g., E. coli,	257.5	Scenedesmus
252 24	etc.)	257.6	Chlamydomonas
252.34	Pseudomonas	258.1	.Protozoa, media therefor
252.35	Streptomyces	258.2	Plasmodium
252.4	Mixed culture	258.3	Leishmania
252.5	Bacillus (e.g., B. subtilis, B.	258.4	Eimeria
050 6	thuringiensis, etc.)	259	.Lysis of micro-organism
252.6	Actinoplanes	260	.Preserving or maintaining micro-
252.7	Clostridium		organism
252.8	Escherichia (e.g., E. coli,	261	.Separation of micro-organism
050 0	etc.) or salmonella		from culture media
252.9	Lactobacillus, pediococcus, or	320.1	VECTOR, PER SE (E.G., PLASMID,
052 1	leuconostoc		HYBRID PLASMID, COSMID, VIRAL
253.1	Mycobacterium		VECTOR, BACTERIOPHAGE VECTOR,
253.2	Nocardia		ETC.) BACTERIOPHAGE VECTOR,
253.3	Pseudomonas		ETC.)
253.4	Streptococcus	262	PROCESS OF UTILIZING AN ENZYME OR
253.5	Streptomyces		MICRO-ORGANISM TO DESTROY
253.6	Culture media, per se		HAZARDOUS OR TOXIC WASTE,
254.1	.Fungi		LIBERATE, SEPARATE, OR PURIFY
254.11	Transformants		A PREEXISTING COMPOUND OR
254.2	Yeast; media therefor		COMPOSITION THEREFORE;
254.21	Saccharomyces		CLEANING OBJECTS OR TEXTILES
254.22	Candida	262.5	.Destruction of hazardous or
254.23	Pichia		toxic waste
254.3	Aspergillus	263	.Textile treating
254.4	Neurospora	264	.Cleaning using a micro-organism
254.5	Penicillium		or enzyme
254.6	Trichoderma		
254.7	Fusarium		

265	.Depilating hides, bating, or	286.7	Including mixing or agitation
	hide treating using enzyme or micro-organism	287.1	control .Including measuring or testing
266			
266	Treating gas, emulsion, or foam	287.2	Measuring or testing for
267	.Treating animal or plant		antibody or nucleic acid, or
	material or micro-organism		measuring or testing using
268	Treating organ or animal		antibody or nucleic acid
	secretion	287.3	With sample or reagent
269	Treating blood fraction	20,00	mechanical transport means
	3	287.4	
270	Removing nucleic acid from		Sterility testing means
	intact or disrupted cell	287.5	Means for measuring gas
271	Glyceridic oil, fat, ester-type		pressure or gas volume of gas
	wax, or higher fatty acid		evolved from or consumed in an
	recovered or purified		enzymatic or microbial
272	Proteinaceous material		reaction
_,_	recovered or purified	287.6	Including frangible means for
272	-	20710	introducing a sample or
273	Collagen or gelatin		reagent
274	Carbohydrate material recovered	207 7	_
	or purified	287.7	Including bibulous or absorbent
275	Pectin or starch		layer
276	Sugar (e.g., molasses	287.8	Including multiple, stacked
	treatment, etc.)		layers
277	Cellulose (e.g., plant fibers,	287.9	Including a coated reagent or
277	etc.)		sample layer
070		288.1	Including a bottle, tube,
278	Producing paper pulp	200.1	
279	Hemp or flax treating	000 0	flask, or jar
280	.Resolution of optical isomers or	288.2	Including multiple internal
	purification of organic		compartments or baffles
	compounds or composition	288.3	Including a dish, plate, slide,
	containing same		or tray
281	.Petroleum oil or shale oil	288.4	Including multiple
	treating		compartments (e.g., wells,
282	5		etc.)
	Desulfurizing	288.5	Including means for fluid
283.1	APPARATUS	200.5	_
284.1	.Differentiated tissue (e.g.,		passage between compartments
	organ) perfusion or		(e.g., between wells, etc.)
	preservation apparatus	288.6	Including column separation
285.1	.Mutation or genetic engineering		means
	apparatus	288.7	Including optical measuring or
285.2	With means for applying an		testing means
203.2		289.1	.Bioreactor
	electric current or charge	290.1	Composting apparatus
	(e.g., electrofusion,		
	electroporation, etc.)	290.2	Including agitation means
285.3	Including projectile means	290.3	Compostor is rotatably
286.1	.Including condition or time		mounted
	responsive control means	290.4	Including solid or liquid
286.2	Including position control		transport means into or out of
286.3	Plater, streaker, or spreader		a compostor
		291.1	Malting or mashing apparatus
286.4	Including liquid dispenser	291.2	Movable floor to facilitate
006 =	means	Z J I • Z	
286.5	Including liquid flow, level,	201 2	maintenance (e.g., cleaning)
	or volume control	291.3	Vertically spaced stages,
286.6	Including gas flow or pressure		levels, or floors
	control	291.4	Cascading
		291.5	With agitator or mash turner

291.6	With vertical axis of	305.3	Including cover seal
	rotation	305.4	Including cover seal
291.7	With horizontal axis of	306.1	.Involving lysis of a
	rotation		microorganism by means other
291.8	Rotating vessel		than comminution
292.1	Including means to transmit	307.1	.Microorganism preservation,
292.1	-	307.1	
	light into a bioreactor to		storage, or transport
	facilitate photo- bioreaction	000 1	apparatus
	(e.g., photosynthesis)	308.1	.Means for separation or recovery
293.1	Tubular or plug flow bioreactor		of a microorganism from
293.2	Radial or spiral flow		culture media
	bioreactor	309.1	.Inoculator, streaker, or sampler
294.1	Vessels or trays in series	309.2	Means for inoculation or
295.1	Including a draft tube for		sampling of a closed vessel
	agitation	309.3	Loop or wire streaker
295.2	Airlift bioreactor	309.4	Replica plate
295.3	Including a semi-permeable	317.1	MISCELLANEOUS (E.G., SUBCELLULAR
	membrane or filter		PARTS OF MICRO-ORGANISMS,
296.1	Bubble bioreactor		ETC.)
297.1	Including semipermeable		- ,
257.1	membrane or filter		
297.2	Including perfusion means		
297.3	Including a spinning	CBOCC-1	REFERENCE ART COLLECTIONS
257.5	semipermeable membrane or	CKOSS-1	REFERENCE ART CODDECTIONS
	filter	0.00	
297.4		800	ELIMINATION OR REDUCTION OF
297.4	Including hollow fiber or		CONTAMINATION BY UNDERSIRED
005 5	capillary		FERMENTS (E.G., ASEPTIC
297.5	In combination with a dish,		CULTIVATION)
	plate, or tray	801	ANEROBIC CULTIVATION
298.1	Cylindrical reaction tank or	802	LOGARITHMIC GROWTH PHASE
	vessel horizontally disposed	803	PHYSICAL RECOVERY METHODS (E.G.,
	with respect to its central		CHROMATOGRAPHY, GRINDING)
	axis	804	SINGLE CELL PROTEIN
298.2	With a rotatably mounted tank	805	TEST PAPERS
	or vessel	806	FERTILITY TESTS
299.1	Including solid extended fluid	807	GAS DETECTION APPARATUS
	contact reaction surface	808	OPTICAL SENSING APPARATUS
299.2	Including a bottle, tube, jar,	809	INCUBATORS OR RACKS OR HOLDERS
	or flask		FOR CULTURE PLATES OR
300.1	Including off-gas trapping		CONTAINERS
	means	810	PACKAGED DEVICE OR KIT
301.1	Including foam breaking means	811	INTERFERON
302.1	Including magnetically coupled	812	FOAM CONTROL
	agitation means	813	CONTINUOUS FERMENTATION
303.1	Incubator	814	ENZYME SEPARATION OR PURIFICATION
303.2	Specifically adapted for an	815	.By sorption
	anaerobic microorganism or	816	
	enzyme (e.g., anaerobe jars)		.By solubility
303.3	Including an agitator	817	ENZYME OR MICROBE ELECTRODE
304.1	Bottle, tube, jar, or flask	818	AERATION OR OXYGEN TRANSFER
304.1	Including multiple internal	0.4.6	TECHNIQUE
204.4	compartments for baffles	819	FERMENTATION VESSELS IN SERIES
304.3	COMPARCIMENTED TOT DATTIED	820	SUBCELLULAR PARTS OF MICRO-
$\cup \cup \pm \bullet \cup$		020	
305 1	Flat culture flask	020	ORGANISMS
305.1 305.2		020	

821	MICRO-ORGANISMS USED IN THE	872 873	Nocardia
	DESTRUCTION OF HAZARDOUS OR TOXIC WASTE	673 874	Proteus
822		_	Pseudomonas
022	.Using bacteria or actinomycetales	875	Pseudomonas aeruginosa
823	Acetobacter	876	Pseudomonas fluorescens
824	Achromobacter	877	Pseudomonas putida
825		878	Rhizobium
826	Actinomadura	879	Salmonella
	Actinomyces	880	Serratia
827	Actinoplanes	881	Serratia marcescens
828	Aerobacter	882	Staphylococcus
829	Alcaligenes	883	Staphylococcus aureus
830	Arthrobacter	884	Staphylococcus epidermidis
831	Azotobacter	885	Streptococcus
832	Bacillus	886	Streptomyces
833	Bacillus brevis	887	Streptomyces albus
834	Bacillus cereus	888	Streptomyces antibioticus
835	Bacillus circulans	889	Streptomyces aureofaciens
836	Bacillus licheniformis	890	Streptomyces aureus
837	Bacillus megaterium	891	Streptomyces bikiniensia
838	Bacillus polymyxa	892	Streptomyces candidus
839	Bacillus subtilis	893	Streptomyces chartreusis
840	Brevibacterium	894	Streptomyces
841	Chainia		diastatochromogenes
842	Clostridium	895	Streptomyces filipinensis
843	Corynebacterium	896	Streptomyces fradiae
844	Corynebacterium diphtheriae	897	Streptomyces griseus
845	Corynebacterium poinsettiae	898	Streptomyces hygroscopicus
846	Corynebacterium pyogenes	899	Streptomyces lavendulae
847	Erwinia	900	Streptomyces lincolnensis
848	Escherichia	901	Streptomyces noursei
849	Escherichia coli	902	Streptomyces olivaceus
850	Flavobacterium	903	Streptomyces platensis
851	Haemophilus	904	Streptomyces rimosus
852	Klebsiella	905	Streptomyces sparogenes
853	Lactobacillus	906	Streptomyces venezuelae
854	Lactobacillus acidophilus	907	Streptosporangium
855	Lactobacillus brevis	908	Streptovirticillium
856	Lactobacillus casei	909	Vibrio
857	Lactobacillus plantarum	910	Xanthomonas
858	Methylomonas	911	.Using fungi
859	Micrococcus	912	Absidia
860	Micrococcus flavus	913	Aspergillus
861	Micrococcus glutamicus	914	Aspergillus awamori
862	Micrococcus lysodeikticus	915	Aspergillus flavus
863	Mycobacterium	916	Aspergillus fumigatus
864	Mycobacterium avium	917	Aspergillus niger
865	Mycobacterium fortuitum	918	Aspergillus oryzae
866	Mycobacterium smegmatis	919	Aspergillus oryzae Aspergillus ustus
867	Micromonospora	919	
868	Micromonospora chalcea	920	Aspergillus wenti
869	Micromonospora purpurea	921	Candida
870	Mycoplasma		Candida albicans
871	Mycopiasma Neisseria	923	Candida lipolytica
0/1	NGT226TIQ	924	Candida tropicalis

925	Cephalosporium	966	INVOLVING AN ENZYME SYSTEM WITH
926	Cephalosporium acremonium		HIGH TURNOVER RATE OR
927	Cephalosporium caerulens		COMPLEMENT MAGNIFIED ASSAY
928	Cephalosporium crotocinigenium		(E.G., MULTI-ENZYME SYSTEMS,
929	Fusarium		ETC.)
930	Hansenula	967	STANDARDS, CONTROLS, MATERIALS
931	Mucor		(E.G., VALIDATION STUDIES,
932	Paecilomyces		BUFFER SYSTEMS, ETC.)
933	Penicillium	968	HIGH ENERGY SUBSTRATES (E.G.,
934	Penicillium brevi		FLUORESCENT, CHEMILUMINESCENT,
935	Penicillium chrysogenum		RADIOACTIVE, ETC.)
936	Penicillium notatium	969	MULTIPLE LAYERING OF REACTANTS
937	Penicillium patulum	970	TEST STRIP OR TEST SLIDE
938	Pichia	971	CAPTURE OF COMPLEX AFTER ANTIGEN-
939	Rhizopus		ANTIBODY REACTION
940	Saccharomyces	972	MODIFIED ANTIBODY (E.G., HYBRID,
941	Saccharomyces carlsbergensis		BIFUNCTIONAL, ETC.)
942	Saccharomyces cerevisiae	973	SIMULTANEOUS DETERMINATION OF
943	Saccharomyces lactis		MORE THAN ONE ANALYTE
944	Torulopsis	974	AIDS RELATED TEST
945	Trichoderma	975	KIT
946			
940 947			
	.Using protozoa		
948	.Using viruses or cell lines		

#### CROSS-REFERENCE ART COLLECTIONS

RELATED TO SUBCLASSES 7.1 THROUGH 7.95 960 IMMUNOHISTOCHEMICAL ASSAY 961 INCLUDING A STEP OF FORMING, IMMUNOGENIC CARRIER COMPLEX OR from which these Collections were derived. THE ANTIGEN, PER SE 962 PREVENTION OR REMOVAL OF INTERFERING MATERIALS OR REACTANTS OR OTHER TREATMENT TO ENHANCE RESULTS (E.G., DETERMINING OR PREVENTING NONSPECIFIC BINDING, ETC.) 963 METHODS OF STOPPING AN ENZYME REACTION OR STABILIZING THE TEST MATERIALS 964 INCLUDING ENZYME-LIGAND CONJUGATE PRODUCTION (E.G., REDUCING RATE OF NONPRODUCTIVE LINKAGE, ETC.) 965 INVOLVING IDIOTYPE OR ANTI-IDIOTYPE ANTIBODY

#### FOREIGN ART COLLECTIONS

#### FOR 000 CLASS-RELATED FOREIGN DOCUMENTS

Any foreign patents or non-patent literature from subclasses that have been reclassified have been transferred directly to FOR Collections listed below. RELEASING, OR EXPOSING THE enthetical references in the parameters of the parameters ANTIGEN OR FORMING THE HAPTEN- titles refer to the abolished subclasses

> FOR 100 ANIMAL OR PLANT CELL (E.G., CELL LINES, ETC.); COMPOSITIONS THEREOF; PROCESS OF PROPAGATING, MAINTAINING OR PRESERVING ANIMAL OR PLANT CELL OR COMPOSITION THEREOF; PROCESS OF ISOLATING OR SEPARATING AN ANIMAL OR PLANT CELL OR COMPOSITION THEREOF; PROCESS OF PREPARING A COMPOSITION CONTAINING ANIMAL OR PLANT CELL; CULTURE MEDIA THEREFORE (435/240.1)

FOR 101 .Animal cells, per se, culture techniques and media (435/ 240.2)

- FOR 102 .. Techniques of establishing a primary culture (435/240.21)
- FOR 103 ..Culture of encapsulated cells (435/240.22)
- FOR 104 ..Culture of cells on solid support (e.g., anchorage dependent cells) (435/240.23)
- FOR 105 ...Support is suspendable particle (435.240.24)
- FOR 106 ...Culture of cells on membrane (435/240.241)
- FOR 107 .... Hollow fiber membrane (435/ 240.242)
- FOR 108 ...Solid support treated or coated to enhance attachment or growth (435/240.243)
- FOR 109 ..Culture in suspension (435/ 240.25)
- FOR 110 .. Fused or hybrid cells (435/ 240.26)
- FOR 111 ... Ab or Ig fragments producing cells (435/240.27)
- FOR 112 ..Culture medium, per se (435/ 240.3)
- FOR 113 ...Defined medium (435/240.31)
- FOR 114 .Plant cells, per se, culture techniques and media (435/240.4)
- FOR 115 ..Culture techniques (e.g., meristem culture, etc.) (435/240.45)
- FOR 116 ...Culture in suspension (435/ 240.46)
- FOR 117 ....Protoplasts (435/240.47)
- FOR 118 ... Callus culture (435/240.48)
- FOR 119 ....Regeneration (includes nonflowering ornamentals (435/240.49)
- FOR 120 .....Agronomic crops (e.g., tobacco, grains, etc.) (435/240.5)
- FOR 121 .....Fruit and vegetable crops (e.g., tomato, etc.) (435/240.51)
- FOR 122 ..Culture medium, per se, or regeneration medium, per se (435/240.54)
- FOR 123 MUTATION OR GENETIC ENGINEERING (435/172.1)
- FOR 124 .Fused or hybrid cell formation (435/172.2)
- FOR 125 . Recombination (435/172.3)

- FOR 126 OBTAINING THE DESIRED GENE; DNA,
  RNA PER SE AND THE
  MODIFICATION THEREOF OTHER
  THAN VECTOR MODIFICATION (935/
  1)
- FOR 127 .DNA-RNA hybrid (935/2)
- FOR 128 .RNA (935/3)
- FOR 129 ..mRNA (935/4)
- FOR 130 ..2-100 nucleotides in length, e.g., t-RNA, etc. (935/5)
- FOR 131 .DNA, e.g., regulatory sequences, etc. (935/6)
- FOR 132 .. Homopolymeric, e.g., poly d(A) sequence, etc. (935/7)
- FOR 133 ..12-75 nucleotides in length, e.g., primers, etc. (935/8)
- FOR 134 ..Structural gene sequence (935/9)
- FOR 135 ...Modified structural gene, e.g., nonnaturally occurring sequence, etc. (935/10)
- FOR 136 ... Polypeptide (935/11)
- FOR 137 .... Antigenic material (935/12)
- FOR 138 ....Hormone, e.g., human growth factor, insulin, etc. (935/13)
- FOR 139 ....Enzyme (935/14)
- FOR 140 .... Antibody (935/15)
- FOR 141 .Methods of producing DNA or RNA other than by expression vectors, e.g., culture of cells high in DNA, etc. (935/
- FOR 142 .. Cell free production (935/17)
- FOR 143 ...cDNA synthesis (935/18)
- FOR 144 .Isolation or purification of DNA or RNA (935/19)
- FOR 145 ..RNA (935/20)
- FOR 146 ...mRNA (935/21)
- FOR 147 VECTORS AND METHODS OF MODIFYING VECTORS (935/22)
- FOR 148 .Inserting gene into vector to form recombinant vector, i.e., cleavage and ligation (935/23)
- FOR 149 .. Vector utilized, e.g., episomes, etc. (935/24)
- FOR 150 ...Plant virus (935/25)
- FOR 151 ... Cosmid (935/26)
- FOR  $152 \dots Plasmid (935/27)$
- FOR 153 .... Yeast (935/28)
- FOR 154 .... Prokaryotic (935/29)
- FOR 155 ....Plant (935/30)
- FOR 156 ...Bacteriophage (935/31)
- FOR 157 ...Animal virus, e.g., SV40, etc. (935/32)

FOR	158	METHODS OF ENHANCING OR DIMINISHING EXPRESSION (935/ 33)	FOR	191	CELLS CONTAINING A VECTOR AND/OR EXOGENOUS GENE, PER SE; PROPAGATION THEREOF; OTHER
FOR	159	.Eukaryotic cell (935/34)			MEMBRANE ENCAPSULATED DNA,
		Plant cell (935/35)			E.G., PROTOPLASTS, ETC. (935/
		Transcription (935/36)			66)
		Yeast cell (935/37)	FOR	192	.Plant cells (935/67)
					.Fungal cells (935/68)
		.Prokaryotic cell (935/38)Transcription (935/39)			Yeast cells (935/69)
		<del>-</del>			.Animal cell (935/70)
		Operon selection (935/40)			Human cell (935/71)
FOR	100	Promoter, e.g., portable			.Hammin ceri (935/71) .Bacteria (935/72)
	1 ( 7	promoters, etc. (935/41)			Escherichia (935/73)
FOR	Τ0/	Gene dosage modification, e.g.,			Bacillus (935/74)
		copy number amplification,		_	
	1.00	etc. (935/42)	FOR		Streptomyces (935/75)
FOR	168	Inducible, e.g., temperature	FOR	201	ASSAY RELATED TO GENETIC
	1.60	inducible, etc. (935/43)	HOD	202	ENGINEERING (935/76)
		Translation (935/44)	FOR	202	.Methods of analysis of nucleic
		Ribosome binding site (935/45)			acids (935/77)
		Initiation (935/46)	FOR	203	Including hybridization (935/
FOR	172	.Fused protein or peptide (435/			78)
		47)	FOR	204	.Methods of selection of
FOR	173	Signal peptide, e.g.,			recombinant gene containing
		secretion, etc. (935/48)			vector; materials therefore,
FOR	174	.Post translational modification (935/49)			e.g., replica plating, etc. (935/79)
FOR	175	Glycosylation (935/50)	FOR	205	Gene library manipulation (935/
FOR	176	Peptide bond cleavage (935/51)			80)
		METHODS OF INTRODUCING GENE INTO	FOR	206	Antigen-antibody (935/81)
		HOST CELL, E.G.,	FOR	207	Enzyme activity (935/82)
		TRANSFORMATION OR	FOR	208	Host suicide (935/83)
		TRANSFECTION, ETC. (935/52)	FOR	209	Selection medium (935/84)
FOR	178	.Microinjection (935/53)	FOR	210	GENETIC ENGINEERING APPARATUS
		.Microencapsulation, e.g.,			(935/85)
		liposome vesicle, etc. (935/	FOR	211	.Analytical, e.g., for
		54)			autoradiography, etc. (935/86)
FOR	180	.Using vector, e.g., plasmid,	FOR	212	Automated (935/87)
		etc. (935/55)			.Synthesis, e.g., peptide or gene
FOR	181	Plasmid (935/56)			synthesizers, etc. (935/88)
		Virus (935/57)	FOR	214	HYBRID OR FUSED CELL TECHNOLOGY,
		Phage, e.g., phage lambda,			METHODS OF IMMORTALIZING
1 010	100	etc. (935/58)			CELLS, E.G., HYBRIDOMA, ETC.
FOR	184	METHOD OF USE OF GENETICALLY			(935/89)
1 010	101	ENGINEERED CELLS, E.G., OIL	FOR	215	.Method of selection of the
		SPILL CLEANUP, ETC. (935/59)			desired cell (935/90)
FOR	185	.To produce an identified	FOR	216	Of plant cells, e.g.,
1 010	103	chemical product, e.g., amino			protoplasts, etc. (935/91)
		acid, etc. (935/60)	FOR	217	Using positive selection
E∪D	196	Yield optimization (935/61)	1010	21,	technique (935/92)
		_	FOR	218	.Method of production of hybrid
T. OK	10/	.Control of genetic diseases or	1 010	210	or fused cells, e.g.,
		defects by use of added gene,			chromosome or genome transfer
E∪D	1 2 2	e.g., gene therapy (935/62) .Use in animal husbandry (935/63)			techniques, etc. (935/93)
			FOR	219	Of plant cells (935/94)
		.Use in agriculture (935/64)	2 010		prame serre (555/54/
гUК	エラリ	.Vaccine production (935/65)			

- FOR 220 .Fused or hybrid cell, per se (935/95)
- FOR 221 .. Interspecies fusion (935/96)
- FOR 222 ..Fungi, e.g., yeasts, etc. (935/97)
- FOR 223 .. Plant cells (935/98)
- FOR 224 .. Human cell 935/99)
- FOR 225 ... B lymphocyte (935/100)
- FOR 226 ... T lymphocyte (935/101)
- FOR 227 .. Animal cell (935/102)
- FOR 228 ...Murine cell, e.g., mouse cell, etc. (935/103)
- FOR 229 .... B lymphocyte (935/104)
- FOR 230 .... T lymphocyte (935/105)
- FOR 231 .Method of use of the fused or hybrid cell or the product thereof (935/106)
- FOR 232 .. In vivo use of product
- FOR 233 .. In vitro, e.g., cell cultivation techniques, affinity chromatography, etc. (935/108)
- FOR 234 ...Production of non-antibody product (935/109)
- FOR 235 ...For use as testing material (935/110)
- FOR 236 MISCELLANEOUS (935/111)

MEASURING OR TESTING PROCESS
INVOLVING ENZYMES OR MICROORGANISMS; COMPOSITION OR TEST
STRIP THEREFORE; PROCESSES OF
FORMING SUCH COMPOSITION OR
TEST STRIP (435/4)

FOR 237 .Involving nucleic acid (435/6)

## PROJECT C-A435

# SOURCE CLASSIFICATION(S) OF PATENTS IN NEWLY ESTABLISHED SUBCLASSES REPORT

New	Number	Source	Number
Classification	of ORs	Classification	of ORs
424/155.1	1	435/6	10330
424/78.17	1	435/6	10330
427/2.11	3	435/6	10330
435/134	17	435/6	10330
435/161	4	435/6	10330
435/173.9	2	435/6	10330
435/20	2	435/6	10330
435/270	2	435/6	10330
435/287.2	12	435/6	10330
435/29	3	435/6	10330
435/325	13	435/6	10330
435/455	9	435/6	10330
435/456	4	435/6	10330
435/5	417	435/6	10330
435/6.1	116	435/6	10330
	405	435/6	10330
435/6.11	97	435/6	10330
	1820	435/6	10330
435/6.12	197	435/6	10330
	1941	435/6	10330
435/6.13	68	435/6	10330
	629	435/6	10330
435/6.14	89	435/6	10330
	1415	435/6	10330
435/6.15	33	435/6	10330
	399	435/6	10330
435/6.16	67	435/6	10330
	1533	435/6	10330
435/6.17	14	435/6	10330
	101	435/6	10330
435/6.18	20	435/6	10330
	635	435/6	10330
435/6.19	18	435/6	10330
	162	435/6	10330
435/69.1	1	435/6	10330
435/7.2	1	435/6	10330
435/7.22	2	435/6	10330
435/7.23	6	435/6	10330
435/7.24	3	435/6	10330

## PROJECT C-A435

# SOURCE CLASSIFICATION(S) OF PATENTS IN NEWLY ESTABLISHED SUBCLASSES REPORT

New Classification	Number of ORs	Source Classification	Number of ORs
435/7.92	2	435/6	10330
435/91.1	1	435/6	10330
435/91.2	1	435/6	10330
506/1	1	435/6	10330
506/10	1	435/6	10330
506/14	19	435/6	10330
506/17	8	435/6	10330
506/32	1	435/6	10330
506/39	8	435/6	10330
506/4	8	435/6	10330
506/5	1	435/6	10330
506/9	12	435/6	10330
514/4.4	1	435/6	10330
514/4.5	1	435/6	10330
530/350	1	435/6	10330
536/23.1	1	435/6	10330
536/25.4	1	435/6	10330

## PROJECT C-A435

# DISPOSITION CLASSIFICATION(S) OF PATENTS FROM ABOLISHED SUBCLASSES REPORT

Source Classification	Number of ORs	New Classification	Number of ORs
Classification	OI OKS	CIASSILICACION	OI OKS
435/6	10330	435/7.24	3
1337 0	10330	424/78.17	1
		530/350	1
		435/161	4
		506/1	1
		506/39	8
		435/6.12	197
		506/5	1
		435/5	417
		506/4	8
		506/32	1
		435/7.2	1
		514/4.4	1
		435/325	13
		435/7.92	2
		427/2.11	3
		435/6.15	399
		435/6.13	68
		435/455	9
		424/155.1	1
		435/456	4
		435/134	17
		435/7.22	2
		506/17	8
		435/6.16	1533
		435/6.18	635
		435/6.11	97
		435/6.14	89
		506/9	12
		435/29	3
		506/10	1
		435/6.11	1820
		435/6.15	33
		435/173.9	2
		435/287.2	12
		435/7.23	6
		435/270	2
		536/23.1	1
		435/6.14	1415
		435/6.1	405

## PROJECT C-A435

# DISPOSITION CLASSIFICATION(S) OF PATENTS FROM ABOLISHED SUBCLASSES REPORT

Source Classification	Number of ORs	New Classification	Number of ORs
435/6	10330	435/6.19	18
		435/6.1	116
		435/91.1	1
		506/14	19
		435/6.13	629
		435/6.16	67
		435/6.18	20
		435/6.17	14
		435/20	2
		514/4.5	1
		435/91.2	1
		435/69.1	1
		435/6.12	1941
		435/6.19	162
		536/25.4	1
		435/6.17	101

# PROJECT C-A435

# C. CHANGES TO THE US-TO-IPC CONCORDANCE

U.S.		I. P. C.	
Class	<u>Subclass</u>	Subclass	<b>Notation</b>
435	6.1	C12Q	1/68
435	6.11	C12Q	1/68
435	6.12	C12Q	1/68
435	6.13	C12Q	1/68
435	6.14	C12Q	1/68
435	6.15	C12Q	1/68
435	6.16	C12Q	1/68
435	6.17	C12Q	1/68
435	6.18	C12Q	1/68
435	6.19	C12Q	1/68

# PROJECT C-A435

# D. CHANGES TO THE DEFINITIONS

CLASS 435 – CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY			
Definitions Abolished:			
Subclasses:			
6			
Definitions Modified:			
Subclass 40.5: Under SEE OR SEARCH THIS CLASS, SUBCLASS			
Delete:			
6			
Insert:			
6.11			
Subclass 375: Under SEE OR SEARCH THIS CLASS, SUBCLASS			
Delete:			
6			
Insert:			
6.1 through 6.19			
Subclass 455: Under SEE OR SEARCH THIS CLASS, SUBCLASS			
Delete:			
6			
Insert:			

#### PROJECT C-A435

#### D. CHANGES TO THE DEFINITIONS

6.1 through 6.19

Subclass 471: Under SEE OR SEARCH THIS CLASS, SUBCLASS

Delete:

6

Insert:

6.1 through 6.19

**Definitions Established:** 

#### 6.1 Involving nucleic acid:

This subclass is indented under subclass 4. Subject matter where the material to be tested or the composition in which the test is conducted contains nucleic acid or the agent used for the measurement or test contains nucleic acid.

- (1) Note. Nucleic acids for the purpose of this subclass are defined as polynucleotides of three or more nucleotides.
- (2) Note. Proper for this subclass is subject matter involving the staining of samples comprising microorganisms, cells, or tissues specifically for and only for nucleic acid (e.g., DNA, RNA, etc.) with stains, that interact with nucleic acids to produce a signal, such as Feulgen stain or acridine orange.
- (3) Note. For this subclass array, where the claims of a document are strongly weighted toward a specific test protocol or test procedure and possibly with detailed recitation of test components, rather than weighted toward the disease or condition or specific substance being detected, the document is normally classified in the subclass providing for the test procedure, e.g., hybridization, pharmacogenetics, genotyping, amplification, etc. Where the test is in name only, no details or minimal details as to how the test is carried out are recited, the claims recite a list of multiple nucleic acid based tests which can be used alternatively and recite no other details of the tests or the claims recite only very basic steps of the test, the document is normally classified in this array based on what is being tested for, e.g., drug or compound screening involving gene expression, detecting cancer, pathogens, conditions related to the nervous system, enzymes, etc. using a nucleic acid based assay. If both the test protocol and the disease, condition, or substance being tested for are equally weighted, classify the document according to standard rules of classification.

#### PROJECT C-A435

#### D. CHANGES TO THE DEFINITIONS

#### SEE OR SEARCH THIS CLASS. SUBCLASS:

40.5+, for subject matter involving microorganisms, cells, or tissues stained with a composition providing contrasting stains for the cell nucleus and cytoplasm (e.g., hematoxylin, eosin, etc.).

#### SEE OR SEARCH CLASS:

- 436, Chemistry: Analytical and Immunological Testing, subclass 94 for chemical determination of nucleic acid where no microorganisms are involved and if an enzyme is present, it reacts chemically, i.e., non-catalytically. If the activity of the enzyme is unclear, classification is made in Class 435.
- 506, Combinatorial Chemistry Technology: Method, Library, Apparatus, for a process of testing involving a chemical or biological library or an apparatus specially adapted for testing involving said library.
- 536, Organic Compounds, appropriate subclasses for saccharides, polysaccharides, nucleosides, nucleotides, and polynucleotides like RNA or DNA compounds as well as chemical methods of synthesizing such compounds. Search specifically 23.1+ for fragments of RNA or DNA which could have utility as genes in recombinant processes and subclass 24.3 for probes.
- 6.11 Nucleic acid based assay involving a hybridization step with a nucleic acid probe, involving a single nucleotide polymorphism (SNP), involving pharmacogenetics, involving genotyping, involving haplotyping, or involving detection of DNA methylation gene expression:

This subclass is indented under subclass 6.1. Subject matter where the test involves a method for detecting the presence of a nucleic acid in a sample comprising a nucleic acid hybridization step, a single nucleotide polymorphism (SNP), pharmacogenetics, genotyping, haplotyping or the detection of DNA methylation.

- (1) Note. Hybridization is the process of bringing together two complementary strands of DNA or one each of DNA and RNA to from a double-stranded molecule. Nucleic acid hybridization assays involve using a nucleic acid probe of known sequence structure to identify a target molecule that has a significantly high degree of sequence similarity to the nucleic acid probe, within a complex mixture of unlabeled nucleic acid molecules. Hybridization can be used in determining the sequence or order of nucleotides in a nucleic acid in a sequencing assay including assay steps reciting particular hybridization conditions.
- (2) Note. A single nucleotide polymorphism (SNP) is a DNA sequence variation or alteration occurring between members of paired chromosomes in an individual or between members of a species; SNPs are usually considered to be point mutations that have been evolutionarily successful enough to recur in a significant proportion of the population of a species. SNPs may be used in diagnostics for cancer, neurological, cardiovascular and other diseases.

#### PROJECT C-A435

#### D. CHANGES TO THE DEFINITIONS

- (3) Note. Pharmacogenetics is the study of the association between genetic variation and response to drug therapy. An individual's genetic make-up may predict how the individual will react to certain drug therapies.
- (4) Note. Genotyping is determining the genetic make-up of a subject.
- (5) Note. Haplotyping is determining a set of SNPs or alleles (for different genes) that are located closely together on the same chromosome and that tend to be inherited together.
- (6) Note. DNA methylation is an epigenetic event (process involving changes in gene expression but not gene sequence) that affects cell function by altering gene expression and refers to the covalent addition of a methyl group to a DNA base. In mammals DNA methylation occurs most often to the 5-carbon of cytosine in a CpG dinucleotide. The resulting methylated genes may be silenced. Assaying for the presence of methylation in a target DNA can be used for detecting the presence of the target DNA in a sample comprising nucleic acids.
- 6.12 With significant amplification step (e.g., polymerase chain reaction (PCR), etc.):
  This subclass is indented under subclass 6.1. Subject matter wherein the test involves a significant nucleic acid amplification step, such as PCR.
  - (1) Note. Nucleic acid amplification involves increasing or amplifying the number of copies of a target nucleic acid in a sample, using appropriate polymerase enzymes, to levels where they can be detected. Examples are PCR (polymerase chain reaction), TMA (transcription mediated amplification), NASBA (nucleic acid sequence based amplification), rolling circle amplification, LCR (ligase chain reaction), LMP or LMPCR (ligase mediated PCR), SDA (strand displacement amplification), RTPCT (real time PCR), SPA (signal probe amplification), etc.
  - (2) Note. In order to be considered "significant" the amplification reaction should be mentioned in a substantial way such as requiring specific primer pairs, specific enzymes, stating that primers flank or target a specific region or mutation, methods which mention increasing specificity, efficiency, or fidelity of an amplification reaction, etc. Merely reciting "polymerase chain reaction", "ligase chain reaction", "ligase mediated polymerase chain reaction", etc. (assay names where a specific enzyme is part of the name) will meet the standard of "significant" for the purposes of this subclass. Where the amplification reaction is mentioned as one of many alternative methods of detection and no details are given, this is not considered significant.
  - (3) Note. Polymerase chain reaction (PCR) is a technique in molecular genetics which permits the analysis of minute quantities DNA. A target DNA is separated into two strands, incubated with oligonucleotide primers and DNA polymerase resulting in duplication of the target DNA. This cycle can be repeated again and again to result in a multitude of copies of the target DNA. The polymerase enzyme used may be recombinantly produced with modifications in the sequence to enhance the enzyme activity.

#### PROJECT C-A435

#### D. CHANGES TO THE DEFINITIONS

#### SEE OR SEARCH THIS CLASS, SUBCLASS:

91.2, through 91.21, for a cellular exponential or geometric amplification of a nucleotide sequence not involving a test or analysis.

#### 6.13 Drug or compound screening involving gene expression:

This subclass is indented under subclass 6.1. Subject matter wherein the effect of a drug or compound is determined by its influence on the expression of a gene.

#### **6.14** Detecting cancer:

This subclass is indented under subclass 6.1. Subject matter wherein the test involves the detection of the presence of cancer using nucleic acid based assay.

- (1) Note. Cancer or malignant neoplastic disease includes any malignant growth or tumor caused by abnormal and uncontrolled cell division.
- (2) Note. Tests involving oncogenes are included in this subclass.

# 6.15 Involving bacterium, fungus, parasite or protozoan (e.g., detecting pathogen virulence factors, adhesions, toxins, etc.):

This subclass is indented under subclass 6.1. Subject matter wherein the test involves the detection of the presence of bacteria, fungi, parasites or protozoans using nucleic acid based assay.

(1) Note. Testing includes detection, involving a nucleic acid in some manner, of virulence factors, toxins (e.g., bacterial neurotoxins, ADP ribosylating toxins, etc.), coding sequences associated with diseases (e.g., RecA gene, etc.), transacting sequences associated with activation of virulence factors, secretion systems I, II, III, IV, etc. associated with expression of toxins, coding sequences for enzymes in the autoinducer communication pathway, adhesion-related substances (e.g., flagella, intimin, invasin, Tir, etc.), etc.

# 6.16 Involving a nucleic acid encoding a protein related to the nervous system (e.g., nerve related factors, brain-derived cytokines, nerve cell biomarker, etc.):

This subclass is indented under subclass 6.1. Subject matter wherein the nucleic acid involved in the test encodes proteins related to the brain, spinal cord, or peripheral nervous system.

- (1) Note. Proteins related to the nervous system include brain derived neurotrophic factor (BDNF), nerve growth factor (NGF), brain derived cytokines, nerve cell biomarkers (e.g., tau, beta amyloid 42, etc.), ion channel or transporter proteins expressed in the nervous system, etc.
- (2) Note. Ion channel protein or transporter protein is involved in the facilitated diffusion and active transport of substances out of or into the cell.

# 6.17 Involving a nucleic acid encoding a receptor, cytokine, hormone, growth factor, ion channel protein, or membrane transporter protein:

This subclass is indented under subclass 6.1. Subject matter wherein the nucleic acid involved in the test encodes receptors, cytokines, hormones, growth factors, ion channel proteins, or membrane transporter proteins.

#### PROJECT C-A435

#### D. CHANGES TO THE DEFINITIONS

(1) Note. Receptors are proteins on the surface of a cell, in a cell, or isolated from a cell, which acts as a binding site for specific chemicals; cytokines (e.g., lymphokines, interleukins, etc.) are proteins secreted by cells of the immune system which act as intercellular mediators in generating an immune response; ion channel or membrane transporter proteins are integral proteins within a cell membrane, through which selective ion transport occurs.

### 6.18 Involving a nucleic acid encoding an enzyme:

This subclass is indented under subclass 6.1. Subject matter wherein the nucleic acid involved in the test encodes an enzyme.

# 6.19 Detecting nucleic acid by specific antibody, protein, or ligand-receptor binding assay:

This subclass is indented under subclass 6.1. Subject matter wherein the test involves the detection of nucleic acid with a specific antibody, protein, or ligand-receptor binding assay.

### FOR 237 Involving nucleic acid (435/6):

This foreign art collection is indented under unnumbered placeholder 435/4. Foreign art collection where the material to be tested or the composition in which the test is conducted contains nucleic acid or the agent used for the measurement or test contains nucleic acid.

- (1) Note. The tests provided for in this subclass may involve the determination of the mutagenic effect of drugs on nucleic acid containing genetic materials such as genes and chromosomes.
- (2) Note. Nucleic acids for the purpose of this subclass are defined as polynucleotides of three or more nucleotides.
- (3) Note. Proper for this subclass is subject matter involving the staining of microorganisms, cells, or tissues specifically for and only for nucleic acid (e.g., DNA, RNA, etc.) with stains such as Feulgen stain or acridine orange.

### PROJECT C-A435

## D. CHANGES TO THE DEFINITIONS

CLASS 436 - CHEMISTRY: ANALYTICAL AND IMMUNOLOGICAL TESTING

**Definitions Modified:** 

Subclass 86: Under SEE OR SEARCH CLASS in the reference to Class 435

Delete:

6

**Insert:** 

6.1 through 6.19

Subclass 94: Directly below the (1) Note

Insert:

### SEE OR SEARCH CLASS:

435, Chemistry: Molecular Biology and Microbiology, 6.1-6.19 for a measuring or testing process involving enzymes or micro-organisms and wherein the material tested or the composition in which the test is conducted contains nucleic acid or the agent used for the measurement or test contains nucleic acid.

## PROJECT C-A435

## D. CHANGES TO THE DEFINITIONS

CLASS 536 – ORGANIC COMPOUNDS – PART OF THE CLASS 532 – 570 SERIES

Definitions Modified:

Subclass 24.3: Under SEE OR SEARCH CLASS in the reference to Class 435

Delete:

6

Insert:

6.11