1 **DESTRUCTION OR CONTAINMENT OF RADIOACTIVE WASTE**
2 .By fixation in stable solid media
3 ..Cement, concrete, or hydraulic setting
4 ...With additional solid material to enhance fixation of radioactivity
5 ..Bituminous
6 ..Resin or polymer; e.g., cellulose, polyethylene
7 ...Ion exchange resin
8 ...Polymer derived from ethylenically unsaturated monomer
9 ..Clay or claylike
10 ..Ceramic or ceramiclike
11 ...Glass, glasslike, vitreous
12 ....Boron containing
13 ..Ion exchange material
14 ..Silicon containing
15 ..Metal containing
16 .Surrounding with specified material or structure
17 .Geological or extraterrestrial
18 .Chemical conversion to a stable solid for disposal
19 ..Incineration, calcination, pyrolyzing to obtain solid residue
20 .Treating radioactive liquid
299 **GERM WARFARE AGENTS DESTROYED**
300 **PROCESSES FOR MAKING HARMFUL CHEMICAL SUBSTANCES HARMLESS, OR LESS HARMFUL, BY EFFECTING A CHEMICAL CHANGE IN THE SUBSTANCES (EPO/ JPO)**

Note: When classifying in subclasses 300-321, classification is also made in subclasses 400-415 to identify the hazardous substance.

301 .By subjecting to electric or wave energy or particle or ionizing radiation (EPO/ JPO)
302 ..Electrochemical processes, e.g., electrodialysis (EPO/ JPO)
303 ...Electrolytic degradation or conversion (EPO/JPO)
304 ..Sonic energy (EPO/JPO)
305 ..Particle radiation, e.g., electron beam radiation (EPO/ JPO)
306 ..Electromagnetic radiation, e.g., laser (EPO/ JPO)
307 ...Gamma rays (about 0.003nm-0.03nm) (EPO/JPO)
308 ...X-rays (about 0.03mn-3nm) (EPO/JPO)
309 ...Ultraviolet radiations (about 3nm-400nm) (EPO/JPO)
310 ...Microwave radiations (about 0.3cm-30cm) (EPO/JPO)
311 ..Plasma (EPO/JPO)
312 .By hydropyrolysis or destructive steam gasification, e.g., using water and heat or supercritical water, to effect chemical change (EPO/JPO)
313 .By reacting with chemical agents (EPO/JPO)
314 ..By treatment in molten chemical reagent, e.g., salts or metals (EPO/JPO)
315 ..By chemical fixing the harmful substance, e.g., by chelation or complexation (EPO/JPO)
316 ..Dehalogenation using reactive chemical agents able to degrade (EPO/JPO)
317 ..By hydrolysis (EPO/JPO)
318 ..Detoxification by using acid or alkaline reagents (EPO/JPO)
319 ..By reduction, e.g., hydrogenation (EPO/JPO)
320 ..By oxidation; by combustion (EPO/JPO)
321 .By heating to effect chemical change. e.g., pyrolysis (EPO/ JPO)
400 .Harmful chemical substances made harmless, or less harmful, by effecting chemical change (EPO/JPO)

Note: Subclasses 401 through 404 form part of a multiple aspect schedule. Documents classified in one of these subclasses are normally also classified in subclasses 405 through 415 to identify the hazardous material.

401 ..Chemical warfare substances, e.g., cholinesterase inhibitor (EPO/JPO)
402 ..Pesticides, e.g., insecticides, herbicides, fungicides, nematicides (EPO/JPO)
403 ..Explosives, propellants or pyrotechnics, e.g., rocket fuel, napalm (EPO/JPO)
404 ..Toxic combustion residues, e.g., toxic substances contained in fly ash from waste incineration (EPO/JPO)
405 ..Organic substances (EPO/JPO)
406 ...Containing halogen (EPO/JPO)
407 ...Containing heavy metals (EPO/JPO)
408 ...Containing nitrogen or phosphorus (EPO/JPO)
409 ...Containing oxygen, sulfur, selenium or tellurium, i.e., chalcogen (EPO/JPO)
410 ..Inorganic substances (EPO/JPO)
411 ...Inorganic fibers, e.g., asbestos (EPO/JPO)
412 ...Containing heavy metals, in the bonded or free state (EPO/JPO)
413 ...Containing nitrogen phosphorus (EPO/JPO)
414 ...Containing oxygen, sulfur, selenium or tellurium, i.e., chalcogen (EPO/JPO)
415 ...Containing halogen (EPO/JPO)
249 **CONTAINMENT**
249.5 .Chemical or germ warfare agents, or pathogenic organisms (e.g., sarin, VX, anthrax, virus, bacteria and medical waste, etc.)
250 .Geologic, marine, or extraterrestrial storage and containment (e.g., tectonic, volcanic, deep natural, manmade earth cavity, submarine placement sites, lunar, earth orbital, and solar placement, etc.)
251 .Treating a solid (e.g., clay, slag, spent sorbent, active carbon, etc.) to prevent gas emissions
252 .Solidification, vitrification, or cementation
253 ..In situ vitrification
254 ..Contains asbestos
255 ..Polymer or resin containing (e.g., foam, etc.)
256 ..Waste contains heavy metal (e.g., fly, ash, flue dust, and incinerator ash)
257 ...And confined in a cement type material (e.g., concrete)
259 .Secondary containment
260 .With sensing, detecting, or monitoring
261 **MISCELLANEOUS**

CROSS-REFERENCE ART COLLECTIONS

900 **APPARATUS**
901 **COMPOSITIONS**

FOREIGN ART COLLECTIONS

FOR 000 **CLASS-RELATED FOREIGN DOCUMENTS**