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| <p>This Class 392 is considered to be an integral part of Class 219 (see the Class 219 schedule for the position of this Class in schedule hierarchy). This Class retains all pertinent definitions and class lines of Class 219.</p> <p><b>HEATING DEVICES (CLASS 219<br/>SUBCLASS 200)</b></p> <p>301 ..Borehole type</p> <p>302 ..With heat exchange fluid</p> <p>303 ..With vapor generator</p> <p>304 ..Heating element surrounding delivery pipe</p> <p>305 ..Suspended by cable in well</p> <p>306 ..Plural separate heating devices</p> <p>307 ..Combined with nonelectric heating means (e.g., gas, etc.)</p> <p>308 ..For heating liquid</p> <p>309 ..Hot plate</p> <p>310 ..Oven type</p> <p>311 ..Fluid-in-circuit type heater</p> <p>312 ..Method</p> <p>313 ..Portable</p> <p>314 ..Continuous flow of fluid being heated</p> <p>315 ..With means to adjust current path between electrodes</p> <p>316 ....Responsive to condition of fluid</p> <p>317 ....Movable dielectric means</p> <p>318 ...Current control means</p> <p>319 ...With discharge member for line or tank</p> <p>320 ...Tube or pipe forms flow path</p> <p>321 ....Pipe forms at least one electrode</p> <p>322 ..With reservoir or tank</p> <p>323 ...With means to adjust current path between electrodes</p> <p>324 ..Steam or vapor generator</p> <p>325 ...Line connected boiler</p> <p>326 ....Control of electrode immersion level</p> <p>327 .....By electrode current</p> <p>328 .....By pressure</p> <p>329 ....With means to adjust current path between electrodes</p> <p>330 .....Movable dielectric means</p> | <p>331 ....Electrode arrangement</p> <p>332 .....Water jet electrode</p> <p>333 ...Manually filled tank or container</p> <p>334 ...With means to adjust current path between electrodes</p> <p>335 ...With supply interlock means</p> <p>336 ....Separate electrode compartment</p> <p>337 .....Electrode compartment removable from tank</p> <p>338 ..Electrode details</p> <p>339 ..With heat storage means</p> <p>340 ..Method</p> <p>341 ..For fluid heating (e.g., gas or liquid, etc.)</p> <p>342 ..For vaporization</p> <p>343 ..For subsequent heating by radiation</p> <p>344 ..For subsequent heating by convection</p> <p>345 ..Means to control heating accumulating medium</p> <p>346 ..Heat accumulating medium details</p> <p>347 ..Convection space heater</p> <p>348 ..Artificial fire</p> <p>349 ..Central heating type</p> <p>350 ...With air delivery duct</p> <p>351 ..Floor furnace type</p> <p>352 ..Baseboard type</p> <p>353 ...With baffle</p> <p>354 ..With intermediate heat absorber</p> <p>355 ...Heated by radiant source</p> <p>356 ....With fan blower</p> <p>357 ...With fluid heat absorber</p> <p>358 ....By fan blower</p> <p>359 ....Wall mounted</p> <p>360 ..Forced air type</p> <p>361 ...Heating attachment for fan</p> <p>362 ...Fan with heated blades</p> <p>363 ...Wall mounted</p> <p>364 ...Ceiling mounted</p> <p>365 ...Portable</p> <p>366 ....With fan position adjusting means</p> <p>367 ....Multi-direction air outlet</p> <p>368 ....With baffle</p> <p>369 .....Counterflow</p> <p>370 ..Wall mounted</p> <p>371 ...In wall cavity</p> <p>372 ..Mounted in or on window or door</p> <p>373 ..Portable</p> |
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|-----|--|-----|---|
| 374 | ...With baffle   | 415 | ...Lamp banks movable relative to stationary work during use    |
| 375 | ..Combined with radiation  | 416 | ..With chamber  |
| 376 | ...With reflector  | 417 | ..For heating moving strand, web or sheet                       |
| 377 | ...With heat exchange fluid  | 418 | ..With support for workpiece                                    |
| 378 | ....In plural sections   | 419 | ..Focussed radiant beam   |
| 379 | .Concentrated heated air stream (i.e., blast)                      | 420 | ...Plural reflectors  |
| 380 | ..For drying body part   | 421 | ...Elliptical or ellipsoidal reflector                          |
| 381 | ...Wall mounted  | 422 | ..With reflector  |
| 382 | ..With support   | 423 | ...Elongated reflector  |
| 383 | ..Portable   | 424 | ...Heating element in transparent tubular envelope              |
| 384 | ...With handle   | 425 | ...With exposed radiant heating element                         |
| 385 | ...Pistol-grip type  | 426 | ...Bowl-shaped reflector  |
| 386 | .Vaporizer   | 427 | ...Annular heating element concentric with reflector axis       |
| 387 | ..Method   | 428 | ...Linear heating element aligned with reflector axis           |
| 388 | ..For metal vapor deposition                                       | 429 | ....Coiled on core  |
| 389 | ...With crucible   | 430 | ...Wall mounted   |
| 390 | ..With disposable evaporant cartridge or container                 | 431 | ...Collapsible or foldable reflector                            |
| 391 | ..By radiant heat source   | 432 | ..Radiant extended surface type heater                          |
| 392 | ..Wall mounted   | 433 | ...With exposed radiant heating element                         |
| 393 | ..By light bulb heat source  | 434 | ...On ceramic support structure                                 |
| 394 | ..Liquid evaporant (e.g., water, etc.)                             | 435 | ...With heat radiating panel                                    |
| 395 | ...With wick   | 436 | ...Wall or ceiling mounted                                      |
| 396 | ...In continuous flow line connected heater                        | 437 | ....Plural panels   |
| 397 | ....Pipe or tube forms flow path                                   | 438 | ...Heating element formed as coating on radiating panel surface |
| 398 | ....With internal heating element                                  | 439 | ....Nonmetallic panel   |
| 399 | ...Flash chamber   | 440 | ..Multi-direction radiant heat output                           |
| 400 | ...In-line connected closed tank (i.e., pressurized)               | 441 | .Tank or container type liquid heater                           |
| 401 | ...With internal heating element                                   | 442 | ..Pour-in displacement discharge type tank                      |
| 402 | ...In-line connected open tank or container (i.e., nonpressurized) | 443 | ..Flexible container (e.g., water bottle, etc.)                 |
| 403 | ...Container with self-contained evaporant supply                  | 444 | ..Portable container or tank                                    |
| 404 | ....Hand-held  | 445 | ...Plural compartments  |
| 405 | ....With separate heating chamber                                  | 446 | ...With agitator  |
| 406 | ....Removable  | 447 | ...With internally positioned heating element                   |
| 407 | .Radiant heater  | 448 | ...Removably inserted through fill opening                      |
| 408 | ..With filter or diffuser for radiant energy                       | 449 | ..Line connected tank   |
| 409 | ..Hand-held  |     |   |
| 410 | ..With air or gas circulation                                      |     |   |
| 411 | ..Lamp banks (i.e., array of plural lamps)                         |     |   |
| 412 | ...Adjustable lamps position                                       |     |   |
| 413 | ...Adjustable individual lamp position                             |     |   |
| 414 | ...Lamp banks form arch  |     |   |

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| 450 | ...Plural serially connected compartments  | 483 | ...Heating element producing radiation                           |
| 451 | ...With immersion heating element  | 484 | ...Block forms flow path   |
| 452 | ...With baffle or guard  | 485 | ..Heated line section with heating element internal of flow path |
| 453 | ...Removably insertable into tubular receptacle in tank                            | 486 | ...Plural pipes or tubes form flow path                          |
| 454 | ...Plural heating zones  | 487 | ..With jacket for heating element                                |
| 455 | ...With heating element mounting arrangements                                      | 488 | ...Pipe or tube forms flow path                                  |
| 456 | ...With heat exchange fluid  | 489 | ...With jacket for heating element                               |
| 457 | ...With protecting means against galvanic corrosion                                | 490 | ...Plural heated line sections (e.g., series or parallel, etc.)  |
| 458 | ..With external heater   | 491 | ...With baffle-defined flow path                                 |
| 459 | ...Clamped or secured to tank wall   | 492 | ...Producing counterflow circulation                             |
| 460 | ...Producing radiation   | 493 | ...Heating element integral with baffle                          |
| 461 | ...With externally mounted circulation-type heater                                 | 494 | ...Block forms flow path   |
| 462 | ...Laterally disposed (i.e., side-arm type)  | 495 | ..Plural different fluids simultaneously heated                  |
| 463 | ..With timer controlled energization   | 496 | ..With heat exchange fluid                                       |
| 464 | ...Off-peak power  | 497 | ..Immersion heater details                                       |
| 465 | ..Continuous flow type fluid heater  | 498 | ..With thermostatic control means                                |
| 466 | ..Method   | 499 | ..Buoyant in liquid  |
| 467 | ..With hot plate   | 500 | ..With plural heating elements                                   |
| 468 | ..Pipeline tracing   | 501 | ..With particular mounting means                                 |
| 469 | ...Skin effect heater type (e.g., S.E.C.T., etc.)                                  | 502 | ..Having positive temperature coefficient                        |
| 470 | ..Disposable cartridge, tube or bag forms heated flow path (e.g., blood bag, etc.) | 503 | ..Particular sheath or jacket composition                        |
| 471 | ..Combined liquid flow heater and pump unit  |     |  |
| 472 | ..Flexibe (e.g., hose, etc.)   |     |  |
| 473 | ..Fluid heater carried on discharge member   |     |  |
| 474 | ...With flow control valve (e.g., faucet, etc.)                                    |     |  |
| 475 | ...Valve turns heating element on and off  |     |  |
| 476 | ...Hand-held discharge member  |     |  |
| 477 | ...With storage container for fluid to be heated                                   |     |  |
| 478 | ..Fluid conveying tube or pipe comprising resistive heating element                |     |  |
| 479 | ..Externally heated line connected section   |     |  |
| 480 | ...Pipe or tube forms flow path  |     |  |
| 481 | ...Coiled  |     |  |
| 482 | ...Plural pipes or tubes form flow path  |     |  |

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