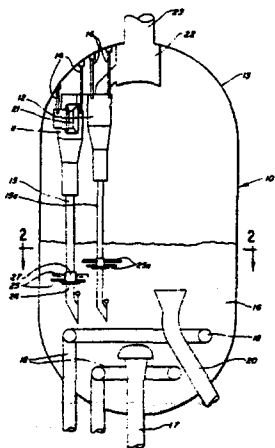


substantially lower in temperature from what exists at the furnace gas outlet of a conventional steam generator. Thus, outlet gas from fluidized bed combustors needs to be placed in the downstream gas path differently from conventional practice. The external combustors of the present invention permit placement of hot gas in the steam generator gas path where it can be effectively utilized. The invention also teaches how new steam generators can be configured advantageously to accommodate multiple fluidized bed combustors particularly as pertains to larger capacity steam generators in the 200 MW electrical and larger range.

4426212

BRACING ASSEMBLY FOR CYCLONE DIPLEGS IN FLUIDIZED BED UNITS

Harold D Zacher assigned to Standard Oil Company (Indiana)

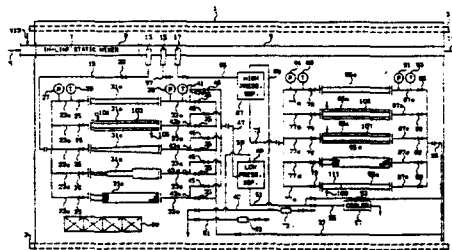


A bracing assembly for use in fluidized bed units having a number of cyclone separators equipped with diplegs is disclosed. The assembly comprises paired brace elements interconnecting adjacent diplegs to form a closed polygon whereby each dipleg in the polygon supports the others to eliminate sway or movement of the diplegs. The method of attachment of the brace elements is such as to accommodate large temperature differentials within the unit during operation and also between operation and shutdown without the creation of abnormal stresses. The assembly is particularly useful in the regenerator vessels of fluid catalytic cracking units.

4426880

METHOD AND APPARATUS FOR FLUID SAMPLING AND TESTING

John P Walters, Radomi Petrovich, Gregory C Daley, Donald C Harban assigned to Phillips Petroleum Company

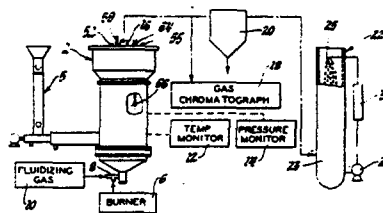


An apparatus for preparing and testing fluid samples in which a two-phase fluid mixture passes through equipment for homogenizing the mixture with at least one isokinetic sampling device arranged to remove portions of the homogenized fluid mixture, with the portions then being passed through testing equipment. Preferably, geothermal fluid is homogenized and samples are withdrawn by the isokinetic sampling device and tested for various properties of the fluid, particularly the formation of scale. The testing apparatus is adapted for on-site operation.

4426936

METHOD AND APPARATUS FOR DISPOSAL OF THERMOPLASTIC WASTE IN A FLUIDIZED BED REACTOR

Hong-Hsiang Kuo assigned to General Motors Corporation



A fluidized bed reactor suitable for burning polymeric waste material, particularly thermoplastics, has been developed as well as a method of using it. The reactor comprises a chamber for retaining a fluidized bed of refractory particles and burning the polymer therein. A specially adapted diffuser plate located at the bottom of