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- (54) **Title:** ACOUSTIC PERFUSION DEVICES

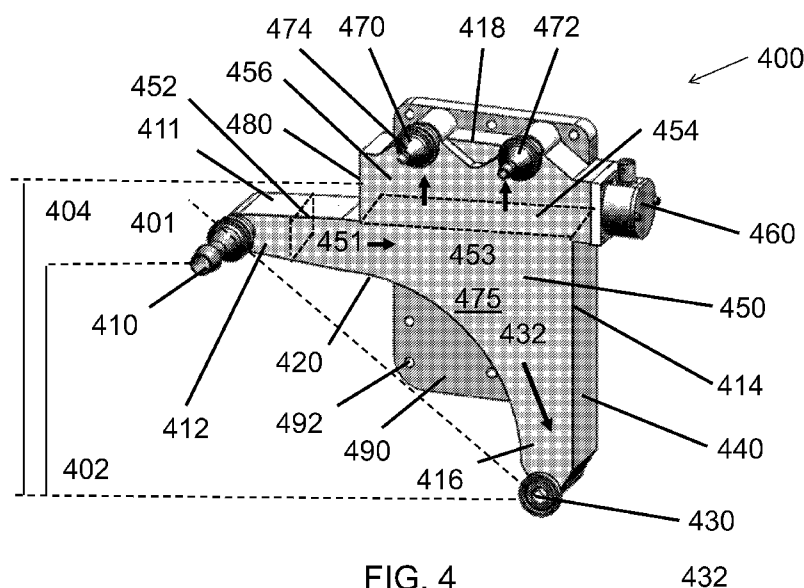


FIG. 4

(57) **Abstract:** Acoustic perfusion devices for separating biological cells from other material in a fluid medium are disclosed. The devices include an inlet port, an outlet port, and a collection port that are connected to an acoustic chamber. An ultrasonic transducer creates an acoustic standing wave in the acoustic chamber that permits a continuous flow of fluid to be recovered through the collection port while keeping the biological cells within the acoustic chamber to be returned to the bioreactor from which the fluid medium is being drawn.



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