Claims:

1. A processing apparatus comprising:

a stationary tank having at least one ~~or more walls~~wall, wherein the tank defines an interior for containing a liquid and one or more parts to be processed;

one or more ultrasonic transducers for providing ultrasonic energy to the interior of the tank;

an air blanket reflector located adjacent to ~~a wall of the tank~~and in closest proximity with an adjacent wall of the tank and directly mounted to the adjacent wall for reflecting ultrasonic energy that would otherwise hit the adjacent wall, wherein the adjacent wall of the tank has a uniform thickness, wherein the air blanket reflector includes a first face panel oriented toward the interior of the tank and a cavity containing no liquid located between the face panel and the adjacent wall of the tank, ~~and~~ wherein the first face panel is substantially parallel to the adjacent wall of the tank, wherein the first face panel has a uniform thickness and has a uniform surface exposed to the interior of the tank, and wherein the uniform thickness of the first face panel is less than the uniform thickness of the ~~walls~~adjacent wall of the tank.

2. A processing apparatus as recited in claim 1, wherein the air blanket reflector includes flanges around the perimeter of the first face panel that are attached to the adjacent wall of the tank, and wherein the cavity is formed between the first face panel and the adjacent wall of the tank.

3. A processing apparatus as recited in claim 2, wherein the flanges are welded to the adjacent wall of the tank.

4. A processing apparatus as recited in claim 1, wherein the air blanket reflector includes a second face panel parallel to and spaced apart from said first face panel, and wherein the cavity is formed between the first and second face panels.

5. A processing apparatus as recited in claim 4, wherein the air blanket reflector includes walls around the perimeter of the first and second face panels, and wherein the perimeter walls are welded to the first and second face panels.

6. A processing apparatus as recited in claim 4, wherein the air blanket reflector is attached to the tank with brackets.

7. A processing apparatus as recited in claim 1, wherein the cavity contains air.

8. A processing apparatus as recited in claim 1, wherein the first face panel is composed of 14 gauge stainless steel~~.~~ and the adjacent wall of the tank is composed of 10 gauge or thicker stainless steel.