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(54) Title: HIGH-TEMPERATURE LUMBER TREATMENT SYSTEM

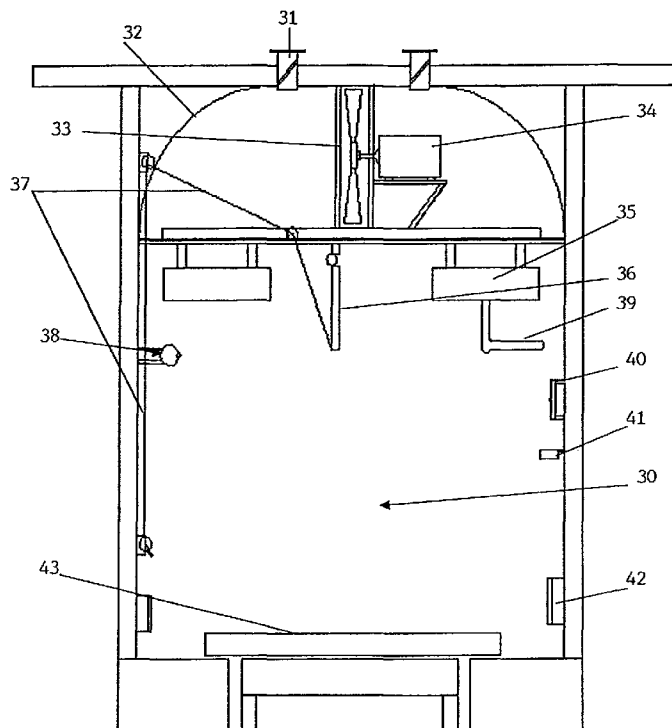


FIGURE 3

(57) Abstract: High-temperature method for the treatment of lumber, the method comprising the steps of providing stacks (10) of lumber, restraining those stacks, subjecting the stacks to a first conditioning phase, drying the stacks in an air stream at a temperature of not less than 120°C, cooling the stacks and subsequently subjecting the stacks to a second conditioning phase, and further cooling the dried stacks in ambient temperature air stream. A kiln for use in the high-temperature lumber treatment method of this invention, comprises a chamber (30) for receiving stacks of lumber, heat supply means to produce and supply heated air and steam for drying and conditioning the stacks, heat exchange means (35) to provide and maintain a stable and sustained temperature environment within the chamber, humidification means to provide and maintain a predetermined equilibrium moisture content within the chamber, air stream generation means (33, 34) to provide a sustained and uniform flow of air within the chamber, and control means for monitoring and controlling various drying parameters within the chamber.



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