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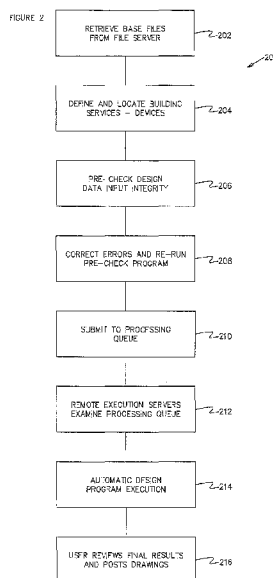
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(54) Title: SYSTEM AND METHOD FOR AUTOMATED BUILDING SERVICES DESIGN



(57) Abstract: A building systems design process uses computer hardware and software to examine multiple possible solutions to the design of building services systems including plumbing, heating, ventilation, air-conditioning, electrical power and lighting through automated calculation procedures and iterative computing methods (204). The process examines multiple valid solutions to the system design requirements, while preparing construction cost estimates of each valid solution examined and comparing the cost of each solution to determine the least costly solution that meets or exceeds all required design parameters entered into the system (214). The solution returned by the optimization process includes a complete representation of the best solution found placed in a CAD database ready for reproduction and use in the bidding and construction of the building (216).

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