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(71) Applicant: UNITED TECHNOLOGIES CORPORA-
TION [US/US]; One Financial Plaza, Hartford, Connectic-
ut 06101 (US).

(72) Inventors: MIRONETS, Sergey; 14 Elmore Road, Nor-
folk, Connecticut 06058 (US). KLUCHA, Agnes; 300
West Road, Colchester, Connecticut 06415 (US).
TWELVES, JR., Wendell V.; 218 Conestoga Way, Gla-
stonbury, Connecticut 06033 (US). FISK, Benjamin T.; 7
Pennywhistle Road, East Granby, Connecticut 06026 (US).

(74) Agent: ATALLAH, David L.; Carlson, Gaskey &
Olds/Pratt & Whitney, c/o CPA Global, P.O. Box 52050,
Minneapolis, Minnesota 55402 (US).

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(54) Title: MULTI-DIMENSIONAL COMPONENT BUILD SYSTEM AND PROCESS

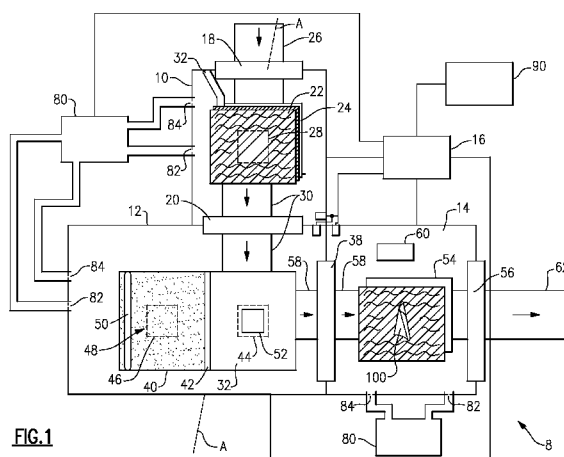


FIG.1

(57) Abstract: An example multi-dimensional component building system includes a first chamber having at least one base, a second chamber adjacent to and in fluid communication with the first chamber through a first door, and a third chamber adjacent to and in fluid communication with the second chamber through a second door. The second chamber is fluidly sealed from the first chamber if the first door is in a closed position. The second chamber includes a directed heat source, a build-up material and is configured to receive the at least one base if the fluid parameters of the first chamber and second chamber are approximately equal. The third chamber is fluidly sealed from the second chamber if the first door is in a closed position. The third chamber is configured to receive the at least one base, having a formed component disposed thereon, if the second door is in an open position.

