US008173931B2

(12) **United States Patent**
Wen et al.

(10) **Patent No.: US 8,173,931 B2**
(45) **Date of Patent: May 8, 2012**

(54) **AUTOMATIC RECIPE MANAGEMENT FOR LASER PROCESSING A WORK PIECE**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 892 days.

(21) Appl. No.: **12/164,698**

(22) Filed: **Jun. 30, 2008**

(65) **Prior Publication Data**

US 2009/0308854 A1 Dec. 17, 2009

Related U.S. Application Data

(60) Provisional application No. 61/061,439, filed on Jun. 13, 2008.

(51) **Int. Cl.**
B23K 26/40 (2006.01)
G06F 19/00 (2011.01)
G05B 19/18 (2006.01)

(52) **U.S. Cl.** **219/121.7**; 219/121.71; 219/121.78; 438/637; 700/166; 700/193

(58) **Field of Classification Search** 438/637–640; 700/166, 193
See application file for complete search history.

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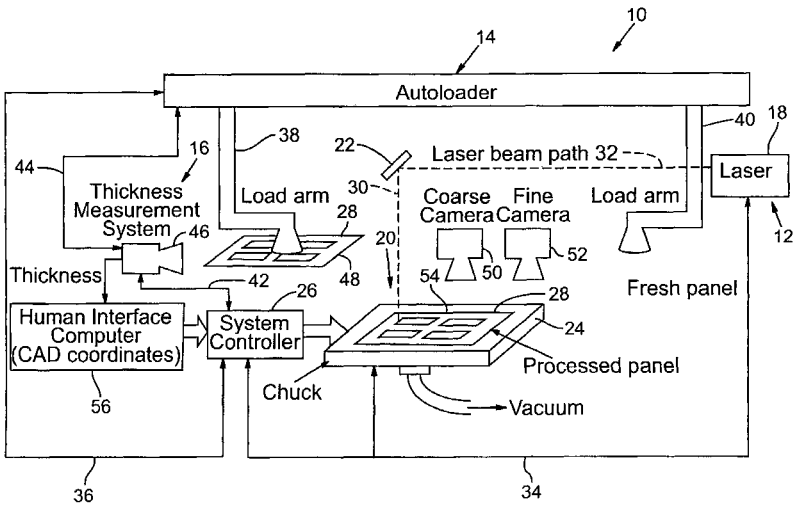
(57) **ABSTRACT**

To better address these problems, one or more characteristics are measured from a work piece (**28**). The measurement information is used to select a preferred predetermined laser processing recipe from a lookup table. The laser processing recipe is then used to process the work piece (**28**). The lookup table of laser processing recipes can be established from theoretical calculations, from trial an error by an operator, from an automated systematic recipe variation process with post process testing, or from some combination of these or other methods. An automated process can also reduce operator errors and may store measurement values for convenient tracking of work piece characteristics.

20 Claims, 5 Drawing Sheets