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Simunovic et al.

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(54) **METHOD AND SYSTEM FOR CONSERVATIVE EVALUATION, VALIDATION AND MONITORING OF THERMAL PROCESSING**

(58) **Field of Classification Search** 374/102, 374/160, 161, 166, 163, 176, 141, 1, 100, 374/101, 104; 99/452; 73/861.05, 861.08, 73/865.6

See application file for complete search history.

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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 0 days.

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(57) **ABSTRACT**

A method of generating a temperature measurement for a batch or a continuous stream of material. The method includes providing a particle having a signal that changes at a pre-determined temperature; inserting the particle into the batch or continuous stream; and detecting a signal change from the particle to thereby generate a temperature measurement for the batch or continuous stream. A suitable system for use in carrying out the method is also described.

- (51) **Int. Cl.**
- A23L 3/005** (2006.01)
 - A23L 1/00** (2006.01)
 - G01K 3/04** (2006.01)
 - G01K 7/02** (2006.01)

(52) **U.S. Cl.** **374/102; 374/104; 374/163; 374/176; 374/141; 99/342**

33 Claims, 12 Drawing Sheets

