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Wagner et al.

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(54) **USING SURFACE TEXTURES AS UNIQUE IDENTIFIERS FOR TRACKING MATERIAL WITH A DISTRIBUTED LEDGER**

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G06F 16/2458	(2019.01)
H04N 7/18	(2006.01)

(52) **U.S. Cl.**

CPC ***G06Q 30/0185*** (2013.01); ***G06F 16/2471*** (2019.01); ***H04N 7/183*** (2013.01)

(58) **Field of Classification Search**

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See application file for complete search history.

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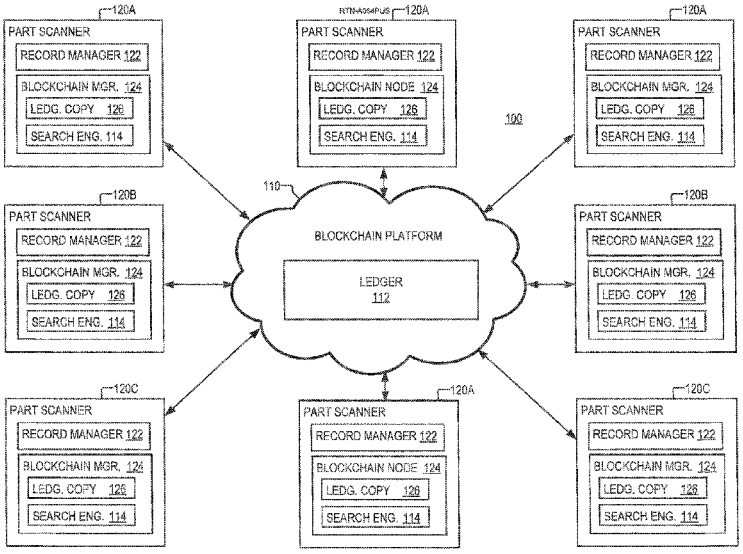
(57) **ABSTRACT**

A method is disclosed for supply chain management, the method comprising: capturing, by a part scanner, a first image of a surface of a part; generating, by the part scanner, a first surface descriptor for the part based on the first image; identifying, by the part scanner, a second surface descriptor that corresponds to a component of the part; generating, by the part scanner, an authentication record for the part based on the first surface descriptor and the second surface descriptor; and storing, by the part scanner, the authentication record in a cryptographically-auditable ledger of a blockchain platform.

20 Claims, 9 Drawing Sheets