United States Patent [19]

Stanislaw et al.

[54] TENTERING APPARATUS AND METHOD

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- [58] Field of Search 26/51, 52, 53, 71, 74, 26/88, 87, 89, 91, 80, 90, 92, 88, 89, 76, 77, 78,

81, 84

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[45] Date of Patent: Oct. 26, 1993

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Primary Examiner-Clifford D. Crowder

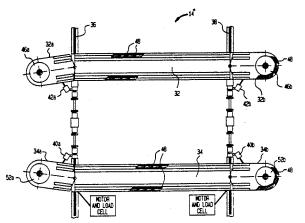
Assistant Examiner-Amy B. Vanatta

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[57] ABSTRACT

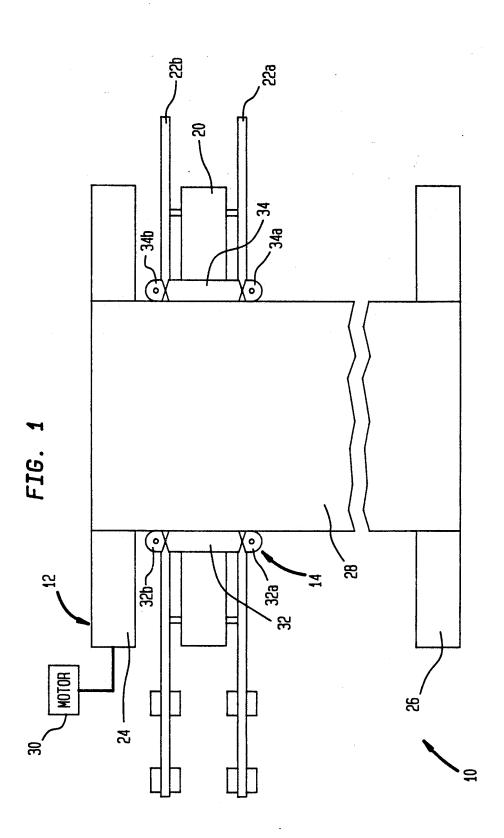
A tentering system having a pair of spaced tenter rails defining a first end, a second end and a tentering path, and moveable material securement members carried by the tenter rails is disclosed. The tentering system may include first material guides at the first end of the tenter rails and second material guides at the second end of the tenter rails, and at least one drive motor for alternately and selectively driving the securement members in the first and second directions. In addition or in the alternative, a pair of direct drive motors is provided at the first end of the tenter rails, each of the direct drive motors including a clutch moveable between a drive position and a neutral position, and clutch actuating means to selectively and positively move the clutch from the neutral position to the drive position. In addition or in the alternative, first and second pairs of direct drive motors are provided at the first and second ends of the tenter rails, respectively. Still further, first and second tension adjusting motors are provided at the first and second ends of the tentering rails for selectively and independently adjusting the tentering width at the first and second ends and for adjusting the tension on material at the first and second ends. A method of tentering material on a finishing machine by alternately moving material in two opposite directions is also disclosed.

46 Claims, 5 Drawing Sheets

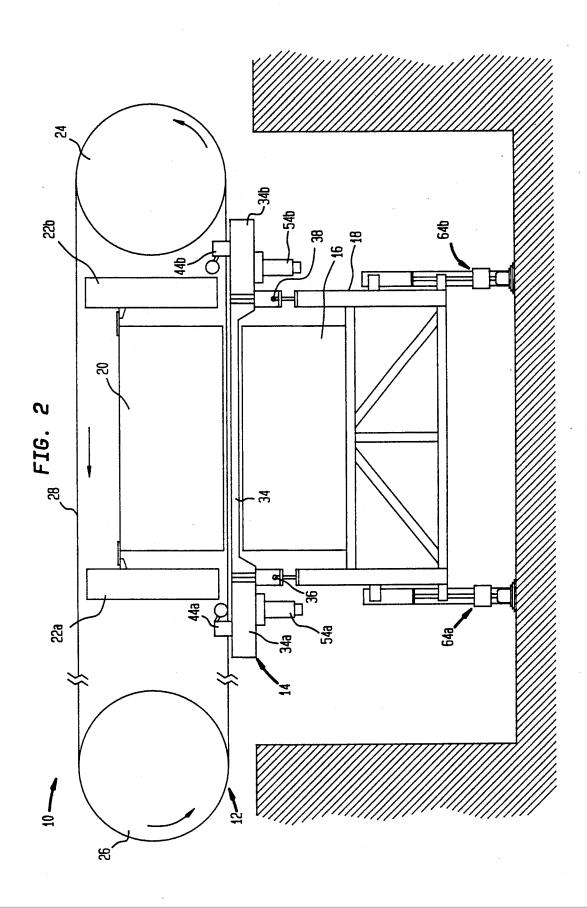


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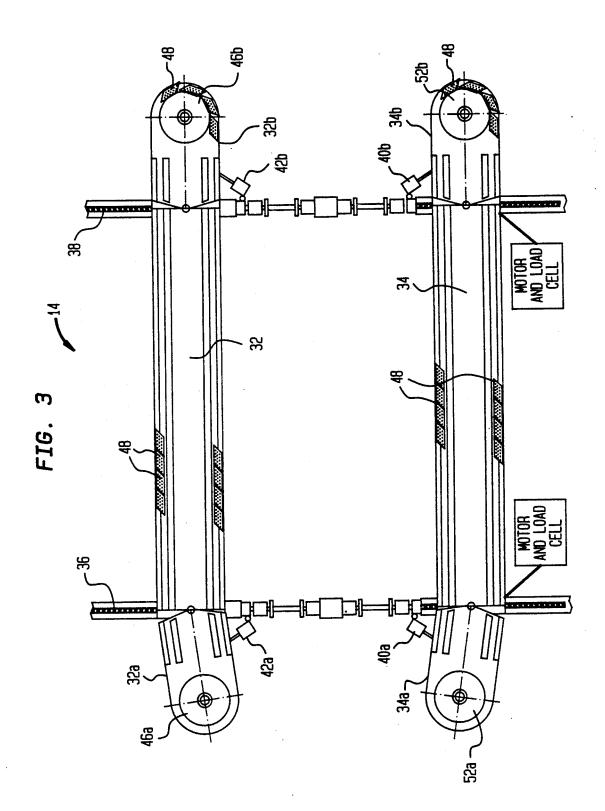
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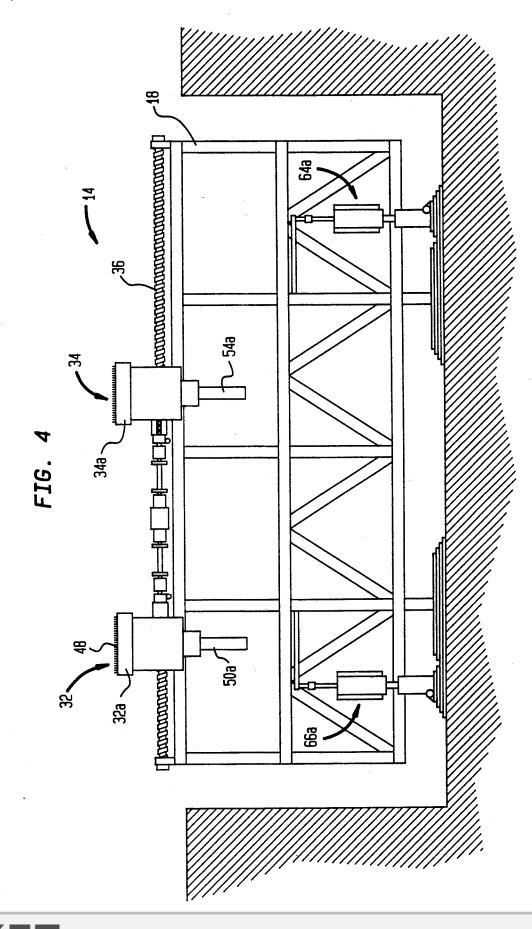
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