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Ishiwatari et al.

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(54) **METHOD FOR PRESS FORMING ANALYSIS**

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(57) **ABSTRACT**

(51) **Int. Cl.**

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G01L 1/04 (2006.01)

A method for press forming analysis includes (1) performing a coordinate transformation to calculate a distribution of stress (a) before a release from the press die in a local coordinate system; (2) performing a springback analysis which includes (i) calculating a distribution of residual stress after the release and performing the coordinate transformation to calculate a distribution of residual stress (b) in the local coordinate system, and (ii) calculating shape data (d) after the release; (3) calculating a difference (a-b) as SB effective stress, performing a coordinate transformation to calculate a distribution of SB effective stress in a global coordinate system, changing or removing the SB effective stress in an analysis target region and performing the springback analysis to calculate a shape data (c) after the release; and (4) calculating a difference (c-d) to determine a degree of influence of the analysis target region.

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

CPC **G01L 1/04** (2013.01); **G06F 17/5018** (2013.01); **G06F 17/5095** (2013.01); **Y02T 10/82** (2013.01)

(58) **Field of Classification Search**

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See application file for complete search history.

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2 Claims, 4 Drawing Sheets

