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**Acheson et al.**

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- (54) **MULTI-VARIABLE YIELD MONITOR AND METHODS FOR THE SAME**
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This patent is subject to a terminal disclaimer.

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CPC ..... **G01G 11/003** (2013.01); **G01G 11/04** (2013.01); **G01G 19/12** (2013.01); **G01G 21/23** (2013.01); **A01D 41/1271** (2013.01); **A01D 41/1272** (2013.01); **G01F 13/003** (2013.01)

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See application file for complete search history.

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(57) **ABSTRACT**  
A dynamic yield monitor system includes a plurality of instruments to measure harvested crop characteristics while a crop is in-flow within a harvester elevator. The system includes a volume instrument that measures a harvested crop volume from the in-flow harvested crop within the harvester elevator, and a weight instrument that measures a harvested crop weight from the in-flow harvested crop within the harvester elevator. Optionally, the system includes other instruments including a moisture and temperature instrument. A receiver and processing node communicates with the instrument. The receiver and processing determines variable harvested crop test weight based on at least the measured harvested crop volume and measured harvested crop weight of the in-flow crop. The receiver and processing node further determines a variable yield of the harvested crop based on the measured harvested crop volume, the measured harvested crop weight, and the variable harvested crop test weight.

**23 Claims, 8 Drawing Sheets**

