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(54) Title: BACK-SCATTER ELECTRONS (BSE) IMAGING WITH A SEM IN TILTED MODE USING CAP BIAS VOLTAGE

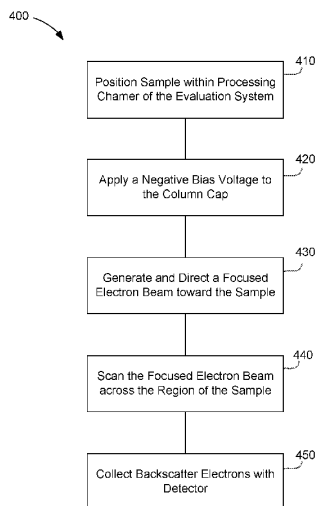


FIG. 4

(57) Abstract: A method of evaluating a region of a sample, the method comprising: positioning a sample within a vacuum chamber; generating an electron beam with a scanning electron microscope (SEM) column that includes an electron gun at one end of the column and a column cap at an opposite end of the column; focusing the electron beam on the sample and scanning the focused electron beam across the region of the sample, while the SEM column is operated in tilted mode, thereby generating secondary electrons and backscattered electrons from within the region; and during the scanning, collecting backscattered electrons with one or more detectors while applying a negative bias voltage to the column cap to alter a trajectory of the secondary electrons preventing the secondary electrons from reaching the one or more detectors.

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