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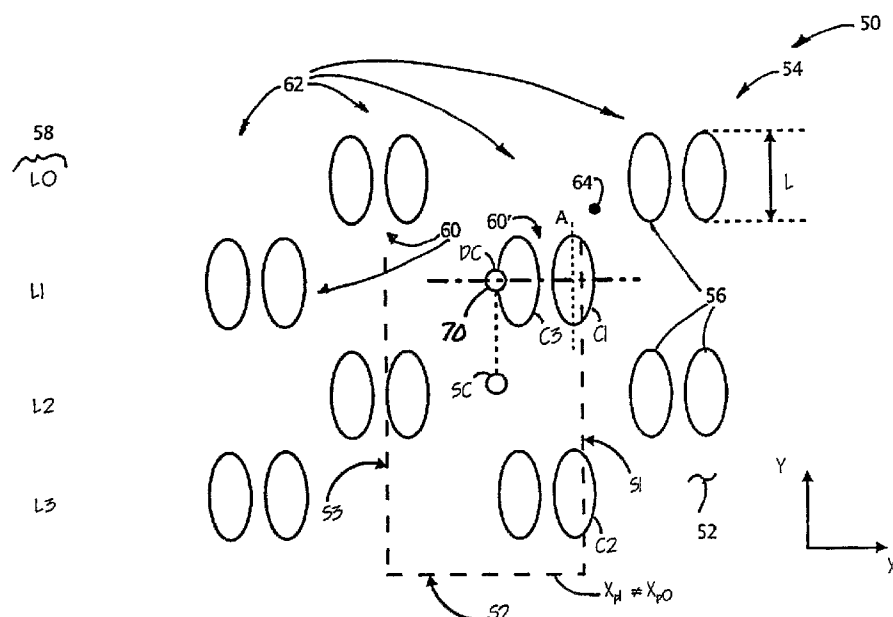
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[Continued on next page]

(54) Title: SCANNING PROBE MICROSCOPY METHOD AND APPARATUS UTILIZING SAMPLE PITCH



(57) Abstract: The preferred embodiments are directed to a method and apparatus of operating a scanning probe microscope (SPM) to perform sample measurements using a survey scan that is less than five lines, and more preferably two lines, to accurately locate a field of features of a sample. This is accomplished by selecting a step distance between adjacent lines of the survey scan that does not equal the pitch of the features in a direction orthogonal to the direction the survey scan traverses, i.e., does not equal the pitch of the features in the scan direction, X_{p0} . The aspect ratio of the scans can also be modified to further improve sample throughput.

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