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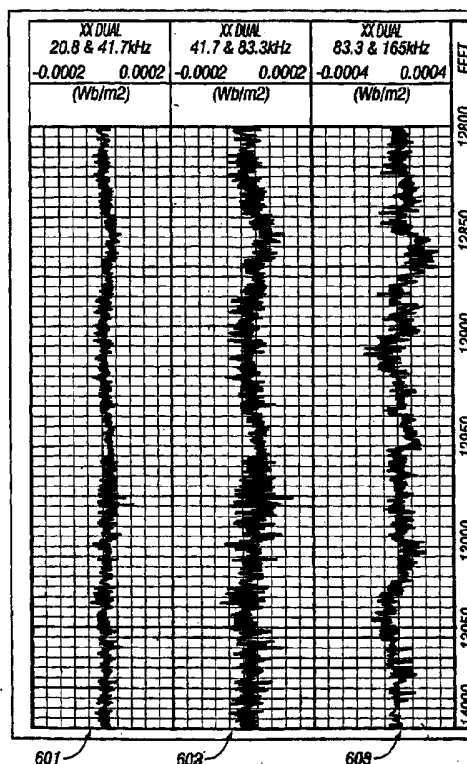
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(54) Abstract Title: **Method and apparatus for use of the real component of a magnetic field of multicomponent resistivity measurements**

(57) Multi-component induction measurements are made using a resistivity logging tool in an anisotropic earth formation. A subset of the multi-component measurements are inverted to first determine horizontal resistivities. Using the determined horizontal resistivities and another subset of the multi-component measurements, the vertical resistivities are obtained. Results of using the in-phase signals are comparable to those obtained using multifrequency focusing of quadrature signals.



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