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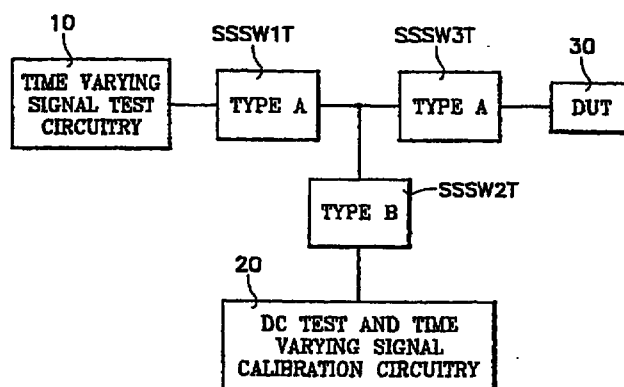
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(54) Title: CIRCUIT AND METHOD FOR IMPROVED TEST AND CALIBRATION IN AUTOMATED TEST EQUIPMENT



(57) Abstract: A preferred embodiment of the present invention provides a time varying signal channel having a series-connected solid state switch interposed between a time varying signal circuit end and a device under test end of the time varying signal channel. A DC test channel is connected to the time varying signal channel between the series-connected solid state switch and the device under test end, and has at least one solid state switch interposed along the DC test channel to provide switchable coupling between a DC parametrics circuit side of the DC test channel and the time varying signal channel. A time varying signal level calibration channel is connected to the time varying signal channel between the series-connected solid state switch and the time varying signal circuit end, and has at least one solid state switch interposed along the signal level calibration to provide switchable coupling between a DC parametrics circuit side of the signal level calibration channel and the time varying signal channel. The time varying signal channel may have a low resistance type solid state switch, while the DC test channel, the signal level calibration channel, or both, may have low capacitance type solid state switches. Thus, opto-coupled MOSFETS, pin diodes, or other kind of solid state switches, may be utilized. The DC test channel, or the signal level calibration channel, or both, may have a force branch and a sense branch each having a solid state switch.

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