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(54) Title: METHOD AND APPARATUS FOR INSPECTING WORKPIECES

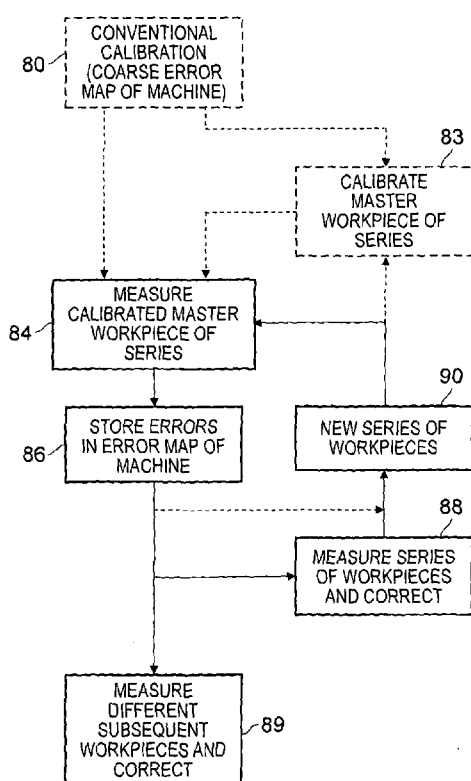


FIG. 3

(57) Abstract: Methods are described for measuring series of nominally identical production workpieces (10) on a dimensional measuring apparatus such as a coordinate measuring machine (12-20). One master workpiece of the series is calibrated (84), to provide correction values which are used to build an error map (86) of the measuring apparatus. This map is used to correct measurements not only of subsequent nominally identical workpieces of the same series (88), but also of multiple different subsequent series (90) of different workpieces. Each subsequent series also has a master workpiece which is calibrated (84) and used to further build the error map (86). As this process is repeated over time, the error map becomes more and more densely populated. In due course, it becomes possible to dispense with the use of a calibrated master workpiece, because measurements can be corrected using error values which already exist in the error map.



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