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(54) **RF/IF SIGNAL DISTRIBUTION NETWORK UTILIZING BROADSIDE COUPLED STRIPLINE**

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(58) **Field of Search** 333/12, 161, 128, 333/238, 116; 174/251, 261; 361/792, 800

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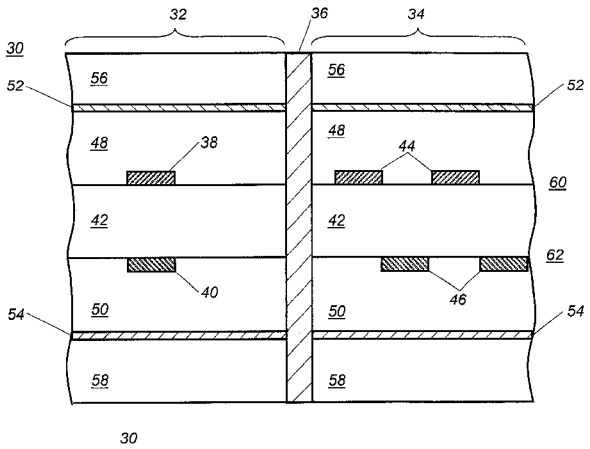
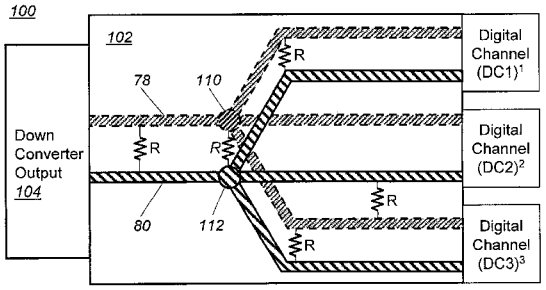
(57) **ABSTRACT**

A Printed Circuit Board (PCB) (**30, 70, 102**) and method of manufacturing same. The PCB (**30, 70, 102**) includes an embedded shielded conductor structure comprising a dielectric layer (**42**) disposed over a first conductor (**40, 80, 84**), and a second conductor (**38, 78, 82**) proximate and coupled to said first conductor (**40, 80, 84**) being disposed over said dielectric layer (**42**). The first (**40, 80, 84**) and second (**38, 78, 82**) conductors are juxtaposed to form a broadside coupled stripline. A first low noise ground layer (**54, 94**) is disposed under said first conductor (**40, 80, 84**), and a second low noise ground layer (**52, 92**) is disposed over said second conductor (**38, 78, 82**), these low noise ground layers typically being coupled to chassis ground. RF (**32, 72**) and digital (**34, 74**) portions of the PCB (**30, 70, 102**) are separated and isolated by a vertical ground shield (**36, 76**). The use of heavy, bulky RF connectors and cables may be eliminated or reduced.

35 Claims, 4 Drawing Sheets