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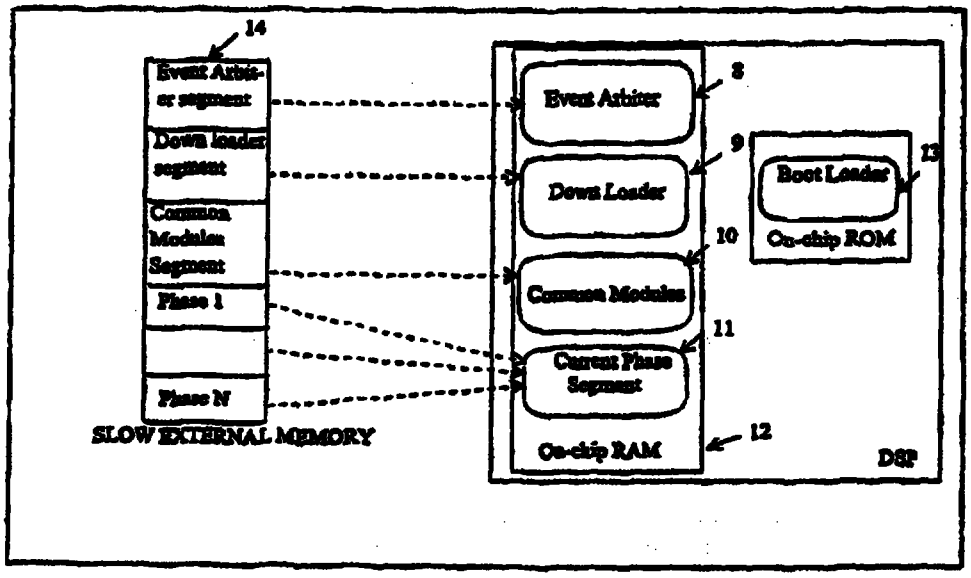
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(54) Title: MODEM ARCHITECTURE AND METHOD OF DATA TRANSFER



(57) Abstract

A modem architecture and a method of reducing on–chip memory requirements in a downloadable modem architecture are provided. The preferred architecture consists of a Digital Signal Processor (DSP) (6) with on–chip Random Access Memory (RAM) (12). A procedure which exploits inactivity intervals in a modem modulation function is provided. The procedure dynamically downloads the requisite code segments for each phase of the function from a cheaper, slower external memory (14) into the DSP on–chip RAM during inactivity intervals, thereby reducing the DSP on–chip RAM requirements.