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(54) **Title:** AUTONOMOUSLY STRUCTURALLY AND FUNCTIONALLY PLASTIC HARDWARE

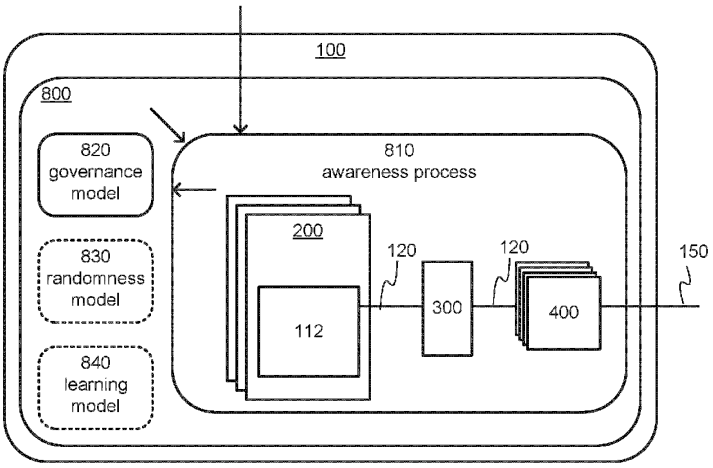


Fig. 11

(57) **Abstract:** A chiplet arrangement (100) is presented. The chiplet arrangement (100) is provided with a chiplet control plane (300) configured to orchestrate one or more microsystems (200) of the chiplet arrangement (100), each microsystem (200) comprises at least one hardware resource (112) and is configured to be addressable at the internal communications interface (120). At least one microsystem is associated with a microservice (400) addressable at the external communications interface (150). The microservice (400) is an independent and loosely coupled software service. The chiplet arrangement (100) is provided with a chiplet plasticity plane (800) configured to provide awareness data of the chiplet arrangement (100), determine an opportunity of reconfiguration of the one or more microsystems (200) of the chiplet arrangement (100) based the awareness data, cause provisioning of a new microsystem based on the determined opportunity, and control the chiplet control plane (300) to deploy the new microsystem.

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