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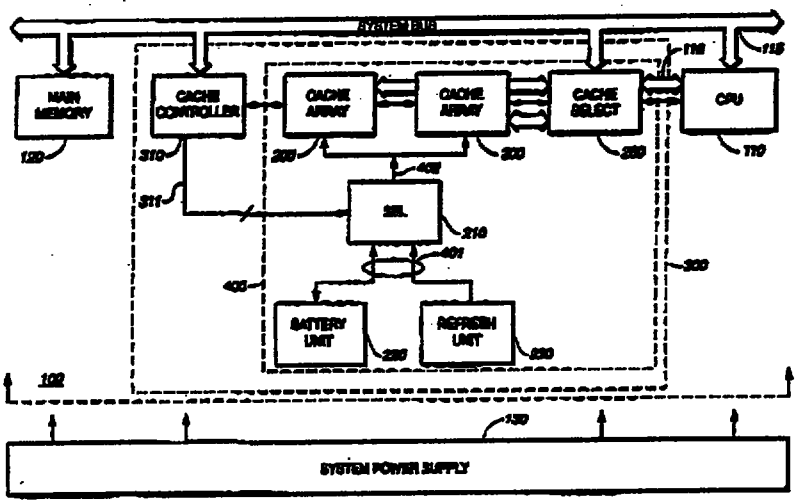
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(54) Title: A MODULAR MIRRORED CACHE MEMORY BATTERY BACKUP SYSTEM



(57) Abstract

A battery backup mirrored cache memory module (210) for a cache dynamic random access memory (DRAM (200)) system that senses the V^{cc} level supplied through the cache controller (310) to the cache memory and, if the cache controller supplied V^{cc} falls below a preset threshold level, the battery backup apparatus (400) switches (210) the cache memory array to a backup battery V^{cc} source (220), and a backup refresh control generator unit (230) that is also powered by the backup battery V^{cc} source (220). The cache DRAM (200), backup battery (220), and backup refresh generator are physically contained in a single module (400) that can be disconnected from the cache controller and host while preserving cache memory contents. The backup system is installed in an operating system for recovery of the cache memory contents and/or resumption of execution of the program that was running when the V^{cc} power failure occurred.