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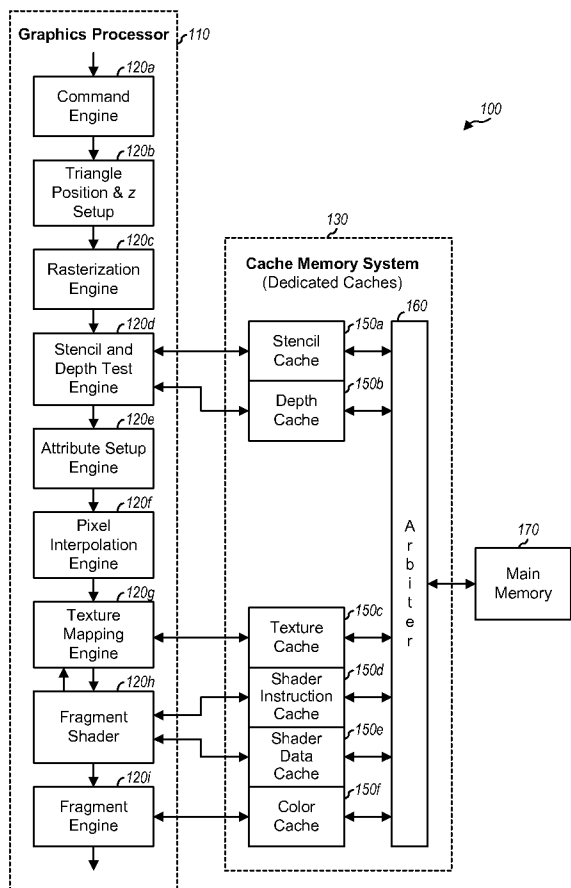
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(54) Title: GRAPHICS SYSTEM WITH CONFIGURABLE CACHES



(57) Abstract: A graphics system includes a graphics processor and a cache memory system. The graphics processor includes processing units that perform various graphics operations to render graphics images. The cache memory system may include fully configurable caches, partially configurable caches, or a combination of configurable and dedicated caches. The cache memory system may further include a control unit, a crossbar, and an arbiter. The control unit may determine memory utilization by the processing units and assign the configurable caches to the processing units based on memory utilization. The configurable caches may be assigned to achieve good utilization of these caches and to avoid memory access bottleneck. The crossbar couples the processing units to their assigned caches. The arbiter facilitates data exchanges between the caches and a main memory.



FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL,
PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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