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(71) Applicant *(for all designated States except US)*: **MICROSOFT CORPORATION** [US/US]; One Microsoft Way, Redmond, WA 98052 (US).

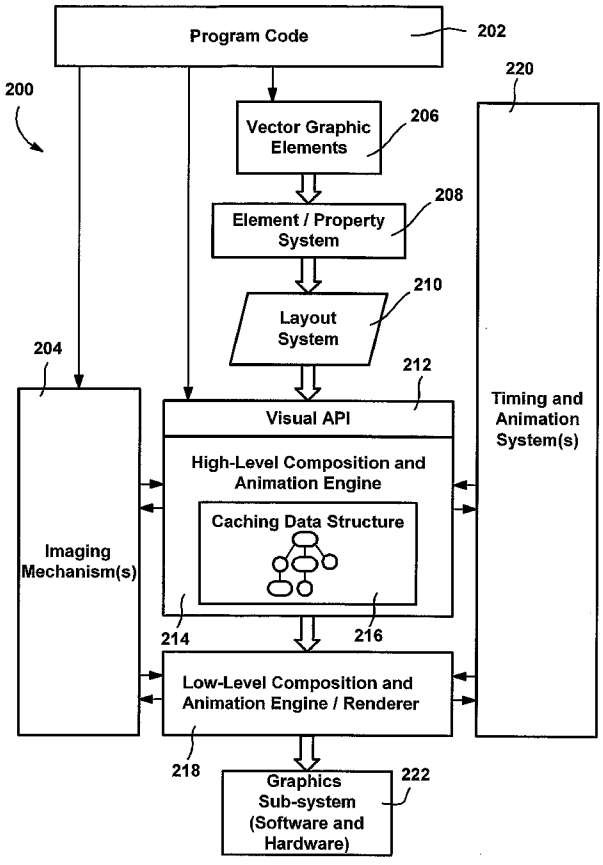
(72) Inventors: **SUBRAMANIAN, Sriram**; 6209 104th Ave NE, Kirkland, WA 98033 (US). **BLANCO, Leonardo, E.**; 9935 225th Avenue NE, Redmond, WA 98053 (US). **CURTIS, Donald, B.**; 13533 SE 52nd Street, Bellevue, WA 98006 (US). **BEDA, Joseph, S.**; 2437 E Lake Washington Blvd, Seattle, WA 98112 (US). **SCHNEIDER, Gerhard, A.**; 8 West Aloha Street, #304, Seattle, WA 98119 (US). **SCHECHTER, Greg, D.**; 1127 37th Avenue East, Seattle, WA 98112 (US). **SMITH, Adam, M.**; 12310 NE 92 ST #H205, Kirkland, WA 98033 (US). **VANDENBERG, Eric, S.**; 1419 2nd Avenue W #201, Seattle, WA 98119 (US). **CALKINS, Matthew, W.**; 503 E Thomas Street #204, Seattle, WA 98102 (US). **GALLO, Kevin, Thomas**; 19235 222nd Way NE, Woodinville, WA 98072 (US). **STOKES, Michael**; 1946 E. Stonybrook Court, Eagle, ID 83616 (US). **GOEL, Rajat**; 121 Vine St.#2206, Seattle, WA 98121 (US).

(74) Agent: **MICHALIK, Albert, S.**; Suite 193, 704-228th Avenue NE, Sammamish, WA 98074 (US).

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(54) Title: MEDIA INTEGRATION LAYER



(57) Abstract: A media integration layer including an application programming interface (API) and an object model allows program code developers to interface in a consistent manner with a scene graph data structure in order to output graphics. Via the interfaces, program code adds child visuals to other visuals to build up a hierarchical scene graph, writes Instruction Lists such as geometry data, image data, animation data and other data for output, and may specify transform, clipping and opacity properties on visuals. The media integration layer and API enable programmers to accomplish composition effects within their applications in a straightforward manner, while leveraging the graphics processing unit in a manner that does not adversely impact normal application performance. A multiple-level system includes the ability to combine different media types (such as 2D, 3D, Video, Audio, text and imaging) and animate them smoothly and seamlessly.

WO 2005/045584 A2

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