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**Pearce et al.**

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**(54) SOFTWARE ANTI-PIRACY SYSTEM THAT ADAPTS TO HARDWARE UPGRADES**

**(75) Inventors:** David B. Pearce, Woodinville, WA (US); Aidan Hughes, Houston, TX (US)

**(73) Assignee:** Microsoft Corporation, Redmond, WA (US)

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**(58) Field of Search** ..... 705/26, 57; 713/187, 713/190, 200, 201; 455/410; 380/250, 27, 258; 707/9-10, 203; 709/229; 711/100

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*Primary Examiner*—V. Millin

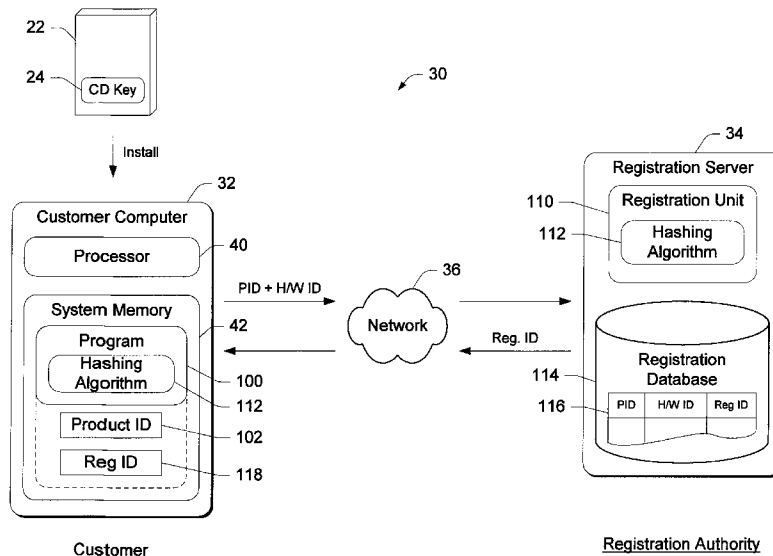
*Assistant Examiner*—Cuong H. Nguyen

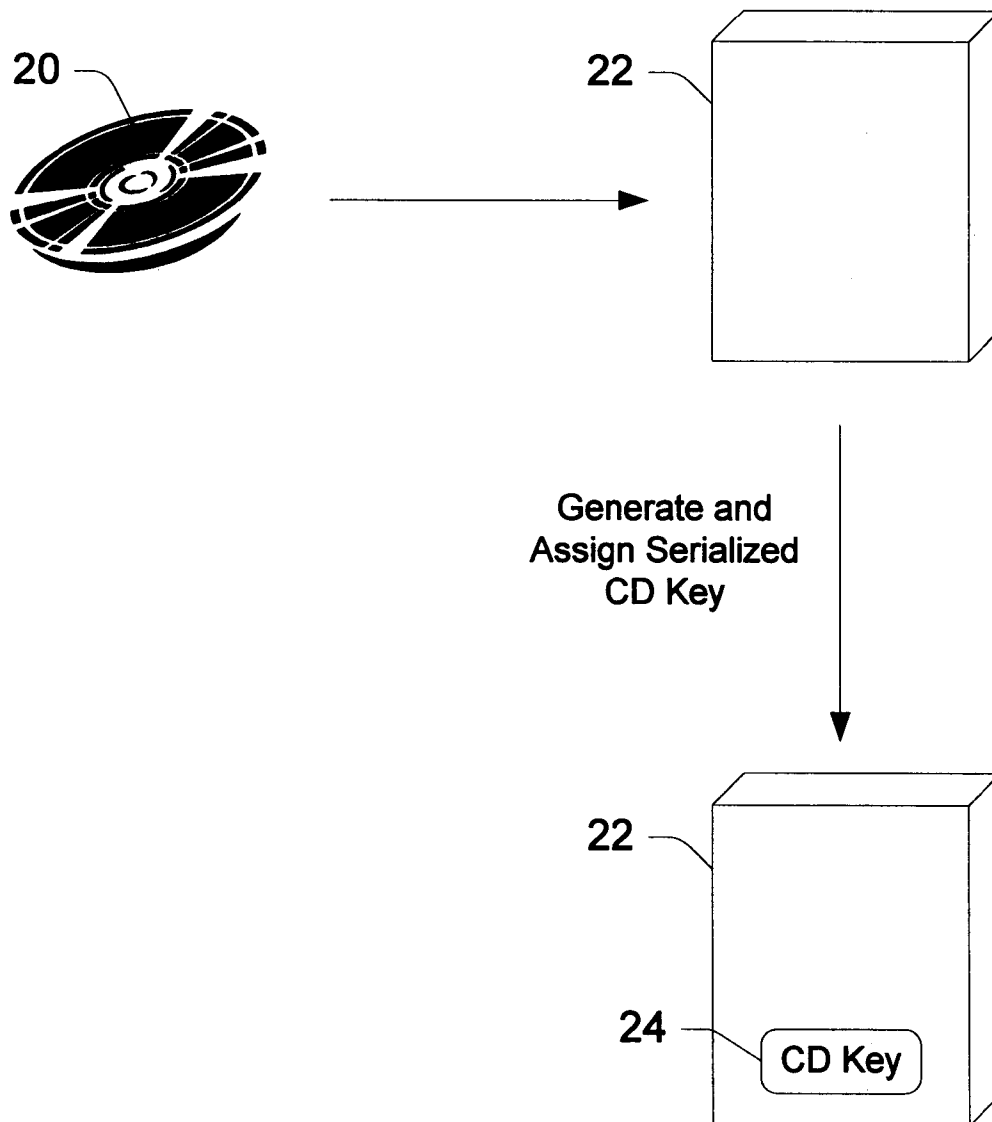
*(74) Attorney, Agent, or Firm*—Lee & Hayes, PLLC

**(57) ABSTRACT**

An anti-piracy system reduces the opportunity for piracy and illicit use of software products by requiring each software product to be registered for a single computer. If a user attempts to install the software product on another computer, the software product will recognize a different hardware composition and disable itself. During installation, the software product generates a hardware ID that identifies the set of hardware components and sends it and a product ID to a registration authority. The registration authority computes a registration ID from the product ID and the hardware ID and sends the registration ID back to the software product. Each time the software product is subsequently launched, the software product computes its own test ID from the product ID and hardware ID using the same algorithm employed by the registration authority. The software product then compares the test ID to the registration ID. If the two match, the software product is enabled; otherwise, if no match occurs, the software product is locked. The system flexibly accommodates a situation in which the user upgrades one or a few components in the computer without creating a new machine. The software product determines whether a new set of hardware components in the computer is substantially different from the original set of hardware components. If not substantially different, the upgraded computer is more like the original computer and the software product is permitted to operate; otherwise, the computer more resembles a new computer and the software product is prevented from operating.

**39 Claims, 6 Drawing Sheets**





*Fig. 1*  
*Prior Art*

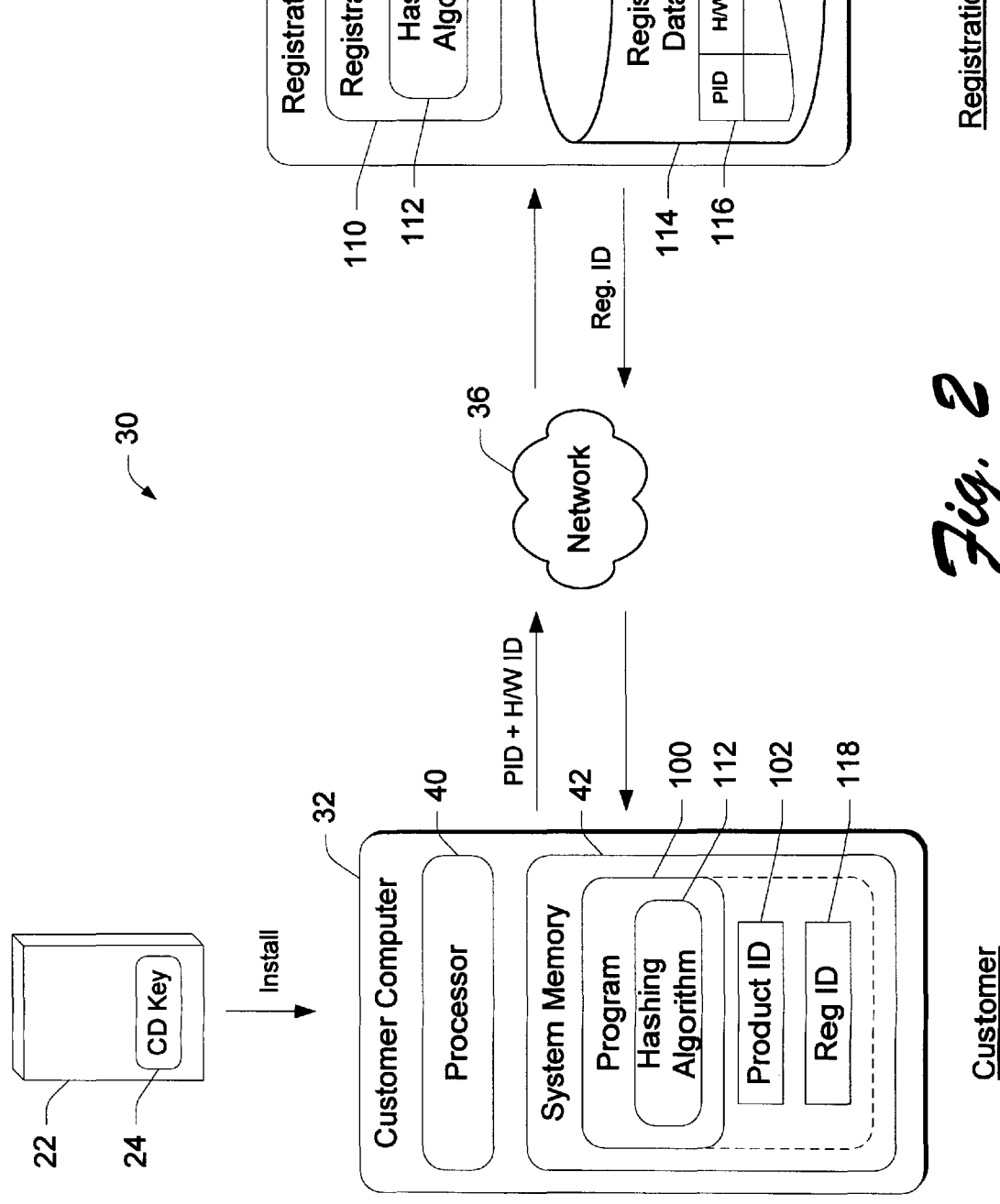
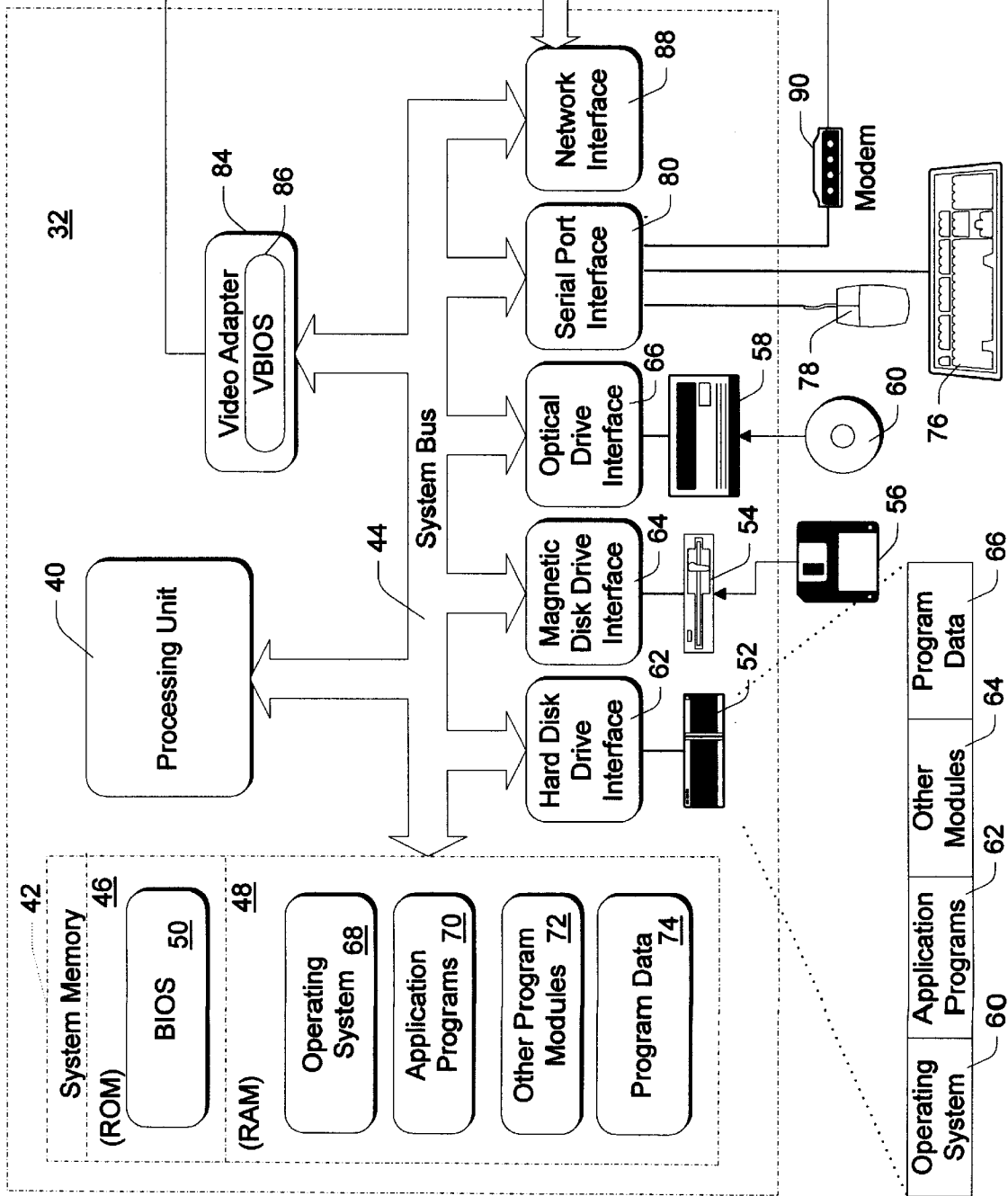
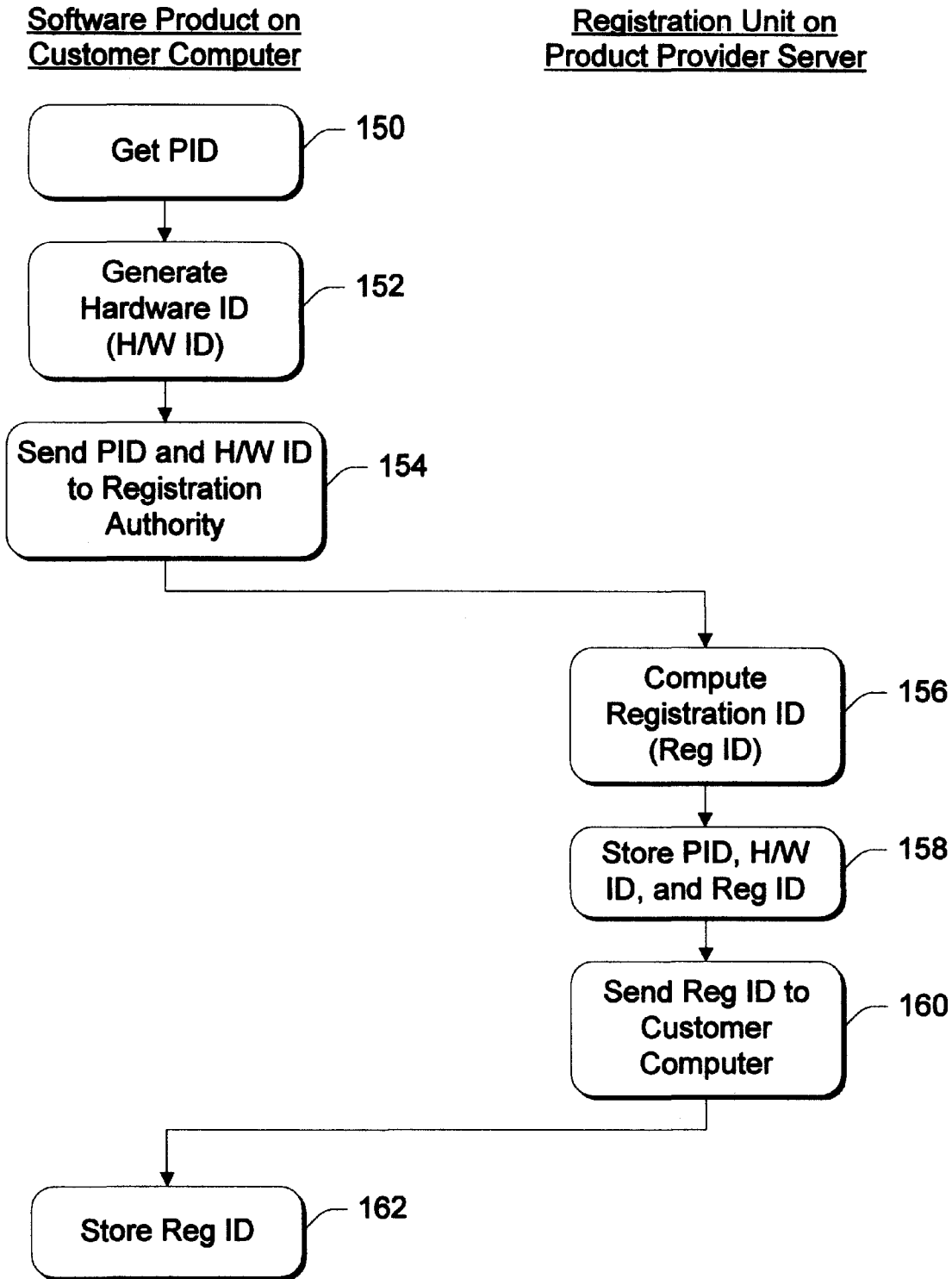


Fig. 2





*Fig. 4*

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