



(12) **United States Patent**  
**MacInnis**

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(54) **MULTICAST DOWNLOADING OF SOFTWARE AND DATA MODULES AND THEIR COMPATIBILITY REQUIREMENTS**

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\* cited by examiner

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(57) **ABSTRACT**

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A system for downloading different versions of software or data modules into a plurality of terminals having different compatibility interfaces includes an authoring component for generating the different module versions, a downloading source including a descriptor table which associates each module version with a list of compatibility requirements needed to download the module, and a plurality of terminals coupled to the downloading source. The downloading source transmits the descriptor table to each terminal and also continuously transmits the modules over the network. Each terminal extracts the descriptor table and, based on a match between an entry in the descriptor table and an internally stored table, determines which version of a particular module should be downloaded. The system avoids the need for two-way communication between each terminal and the downloading source.

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**Related U.S. Application Data**

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(51) **Int. Cl.**<sup>7</sup> ..... **G06F 15/16; G06F 15/177; H04N 7/20; H04N 7/173**

(52) **U.S. Cl.** ..... **725/132; 725/68; 725/70; 725/87; 725/97; 725/109; 725/110; 709/219; 709/220**

(58) **Field of Search** ..... **725/97, 87, 109, 725/110, 68, 70, 132; 709/217, 220**

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**18 Claims, 6 Drawing Sheets**

