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| (54) Title: <b>AN IMPROVED PERIODIC WIRELESS DATA BROADCAST</b>                                                                                                    |  |                                                                                                                                                 |                                                              |

## (57) Abstract

An airdisk (80) performs a TDMA/FDMA (Time Division Multiple Access/Frequency Division Multiple Access) wireless broadcast, divided into periodically-repeated time-slotted data items, analogous to sectors on a rotating disk, over multiple broadcast frequencies, analogous to tracks on a disk. The data items (1-14) on the airdisk may be sorted according to user interest, user profile, or from polling user preferences as by the monitoring of an uplink for user requests. The monitoring of the uplink can be performed in a time less than the rotation period of the airdisk. Users may be precluded from requesting data already on the airdisk for a prescribed time period. The sorting of the data items may be according to rank of popularity, iteratively calculated by an objective function which exchanges ranked weighted data items on the airdisk to obtain the value of candidate sort orders which optimize the objective function.

