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(54) **DYNAMIC TELECOMMUNICATIONS NETWORK OUTAGE RECOVERY BASED ON PREDICTIVE MODELS**

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(57) **ABSTRACT**

A method for dynamic recovery from an unplanned network outage includes aggregating cell site data of multiple cell sites prior to the unplanned outage. The cell site data include subscriber activity data in site coverage areas of the multiple cell sites and data independent of the subscriber activity data. The method includes obtaining resource information of multiple resources available for recovering from the unplanned network outage and generating a predictive model for recovery from the unplanned network outage based on the cell site data and the resource information. The predictive model includes a priority ranking for recovering the multiple cell sites. The method further includes adjusting the predictive model based on live data indicative of a status of the multiple cell sites during the unplanned network outage. The method includes determining a priority ranking for the multiple cell sites and allocating the available resources for the multiple cell sites accordingly.