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(54) Title: ADAPTIVE SCHEDULING FOR MULTI-CARRIER SYSTEMS

(57) Abstract: A scheduler in a base station determines or estimates a cumulative throughput based on the scheduling criteria used by the base station. Based on the cumulative throughput for each slot, the mobile terminals are divided into one of two groups. The first group is provided for mobile terminals having a lower throughput, while the remaining mobile terminals are placed in a second group associated with higher throughput. The mobile terminal in the first group having the lowest throughput has data scheduled for transmission on the next slot over the best available carrier. The remaining mobile terminals in the first group are iteratively scheduled for transmission on the best remaining carriers, until no mobile terminals remain. Once scheduling for the first group is complete, scheduling for the second group can take place. Preferably, scheduling for the second group is performed to maximize throughput on the remaining carrier or carriers.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H04L12/56		
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B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 H04L H04Q		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 00 41542 A (QUALCOMM INC) 20 July 2000 (2000-07-20) abstract page 2, line 24 -page 3, line 34 page 7, line 6 -page 12, line 12 claims 1,3,4 figures 3,5	1-30
A	EP 1 043 902 A (LUCENT TECHNOLOGIES INC) 11 October 2000 (2000-10-11) abstract column 2, line 38 -column 4, line 14 column 7, line 35 -column 8, line 58 claims 1-5 figure 3	1-30
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
° Special categories of cited documents :		
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Information on patent family members

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