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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Bela Rathonyi *et al.* §	Group Art Unit: 2155
	§	
Serial No:	09/537,146 §	Examiner: Frantz B. Jean
	§	
Filed:	March 29, 2000 §	RECEIVED
	§	JAN 1 4 2004

For: Method for Minimizing Feedback Responses in ARQ Protocols Technology Center 2100

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Examiner:

REPLY UNDER 37 C.F.R §1.111

In response to the Office action of October 7, 2003, the Applicants submit the following amendments and remarks.

AMENDMENTS

Amendments to the Claims are reflected in the listing of claims, which begins on page 2 of this paper. This listing of claims will replace all prior versions, and listings, of claims in the application:

Amendments to the Drawings begin on page 10 of this paper and include an attached replacement sheet that indicates the corrections made.

Remarks/Arguments begin on page 11 of this paper.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended)   A method for minimizing feedback responses in an ARQ protocol, comprising the steps of:

sending a plurality of first data units over a communication link;

receiving said plurality of first data units; and

responsive to the receiving step, constructing a message field for a second data unit, said message field including a type identifier field and at least one of a type identifier field, a sequence number field, a length field, and a content field.

2.   (Original)   The method of Claim 1, wherein said message field comprises a bitmap message.

3.   (Original)   The method of Claim 1, wherein said sequence number field includes a sequence number indicating an erroneous first data unit from said plurality of first data units.

4.   (Original)   The method of Claim 1, wherein said sequence number field includes any sequence number from said plurality of first data units.

5.   (Original)   The method of Claim 1, wherein said length field comprises a length value for said content field.

6.   (Original)   The method of Claim 1, wherein said content field comprises a bitmap.

7.   (Original)   The method of Claim 1, wherein said plurality of first data units comprises a plurality of ARQ protocol units including user data.

8.   (Original)   The method of Claim 1, wherein said second data unit comprises information about missing or erroneous said first data units.

9.   (Original)   The method of Claim 1, wherein the size of said length field is zero and a predefined bitmap size is used.

10.   (Original)   The method of Claim 1, wherein said length field indicates a final sequence number in a bitmap.

11.   (Original)   The method of Claim 1, wherein said length field comprises a value of zero.

12.   (Original)   The method of Claim 1, wherein a size of said sequence number field equals zero.

13.   (Original)   The method of Claim 1, wherein at least one of said plurality of first data units is used to piggy-back said message field.

14.   (Original)   The method of Claim 1, wherein said ARQ protocol comprises a selective-repeat ARQ protocol.

15.   (Currently Amended)   A method for minimizing feedback responses in an ARQ protocol, comprising the steps of:
sending a plurality of first data units over a communication link;
receiving said plurality of first data units; and
responsive to the receiving step, constructing a message field for a second data unit, said message field including a type identifier field and at least one of a type identifier field, a length field, a plurality of erroneous sequence number fields, and a plurality of erroneous sequence number length fields, each of said plurality of erroneous

sequence number fields associated with a respective one of said plurality of erroneous sequence number length fields.

16.   (Original)   The method of Claim 15, wherein said message field comprises a list message.

17.   (Original)   The method of Claim 15, wherein at least one value for said plurality of erroneous sequence number length fields comprises zero.

18.   (Original)   The method of Claim 15, wherein said length field comprises a value of zero.

19.   (Original)   The method of Claim 15, wherein said length field comprises an odd value indicating that the last SN is an acknowledgment.

20.   (Original)   The method of Claim 15, wherein said length field comprises an even value indicating that the last SN is not an acknowledgment.

21.   (Original)   The method of Claim 15, wherein said plurality of first data units comprises a plurality of ARQ protocol units including user data.

22.   (Original)   The method of Claim 15, wherein said second data unit comprises information about missing or erroneous said first data units.

23.   (Original)   The method of Claim 15, wherein at least one of said plurality of first data units is used to piggy-back said message field.

24.   (Original)   The method of Claim 15, wherein said ARQ protocol comprises a selective-repeat ARQ protocol.

25. (Currently Amended)   A method for minimizing feedback responses in an ARQ protocol, comprising the steps of:

sending a plurality of first data units over a communication link;

receiving said plurality of first data units; and

responsive to the receiving step, constructing between one to several message fields for a second data unit, said one to several message fields including_a type identifier field and at least one of a type identifier field, a sequence number field, a length field, a content field, a plurality of erroneous sequence number fields, and a plurality of erroneous sequence number length fields, each of said plurality of erroneous sequence number fields associated with a respective one of said plurality of erroneous sequence number length fields.

26. (Original)   The method of Claim 25, wherein said one to several message fields further comprise an acknowledgment message.

27. (Original)   The method of Claim 25, wherein the last of said one to several message fields includes an acknowledgment of all SNs not indicated erroneous by all other of said one to several message fields in said second data unit.

28. (Original)   The method of Claim 25, wherein said one to several message fields further comprise a no more message.

29. (Original)   The method of Claim 25, wherein said one to several message fields include a bitmap message.

30. (Original)   The method of Claim 25, wherein said sequence number field includes a sequence number indicating an erroneous first data unit from said plurality of first data units.

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