UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ARRIS GROUP, INC.
Petitioner

v.

TQ DELTA, LLC Patent Owner

U.S. PATENT NO. 7,835,430

DECLARATION OF LANCE MCNALLY

ARRIS EX. 1002



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| | Claims 1-6 Are Obvious in View of the combination of the "Telebit 250 nical Manual" with Gilbert Held's "Data Communications Networking ces, 4th" | |
| A. | | |
| В. | | |
| ٠. | ~ | |



| C. | Claim 3 | 61 |
|--------|---|-----|
| D. | Claim 4 | .62 |
| E. | Claim 5 | .63 |
| F. | Claim 6 | .65 |
| ("'227 | Claims 1-6 of the '430 Patent are Obvious over U.S. Patent No. 4,679,227 ") to Hughes-Hartogs in view of U.S. Patent No. 4,438,511 ("'511") to and further in view of U.S. Patent No. 5,838,268 ("'268") to Frankel | .66 |
| A. | Claim 1 | .66 |
| B. | Claim 2 | .69 |
| C. | Claim 3 | .71 |
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| F | Claim 6 | 75 |



I. Introduction

- 1. I am over the age of eighteen (18) and otherwise competent to make this declaration.
- I have been retained as an expert witness on behalf of Petitioner ARRIS
 Group, Inc. I am being compensated for my time in connection with this
 IPR. My compensation is in no way dependent on the outcome of this IPR.
- 3. I have been informed and understand that this Petition for *inter partes* review involves Claims 1-6 (collectively "the Challenged Claims") of U.S. Patent No. 7,835,430 (the "'430 Patent"). (Ex. 1001).
- 4. I have been informed and understand that the '430 Patent issued on November 16, 2010, from U.S. Patent Application No. 12/477,742 (the "'742 Application") filed on June 3, 2009. I have been informed and understand that the '970 Patent was filed as a continuation of application No. 10/619,691, filed on July 16, 2003, now U.S. Patent No. 7,570,686, which is a division of application No. 09/755,173, filed on January 8, 2001, now U.S. Patent No. 6,658,052. I have also been informed and understand that the '430 Patent additionally claims priority to U.S. Provisional Application No. 60/224,308, filed on August 10, 2000 and Provisional application No. 60/174,865, filed on January 7, 2000.



- 5. For the purposes of my opinions expressed herein I will use January 7, 2000 as the priority date of the subject matter of the Challenged Claims.
- 6. I have been informed and further understand that, according to USPTO records, the '430 Patent is assigned to TQ Delta, LLC.
- 7. Independent claims 1-6 of the '430 Patent are reproduced below.
 - 1. A transceiver capable of transmitting test information over a communication channel using multicarrier modulation comprising:

 a transmitter portion capable of transmitting a message,
 wherein the message comprises one or more data variables that represent the test information, wherein bits in the message are modulated onto DMT symbols using Quadrature Amplitude

 Modulation (QAM) with more than 1 bit per subchannel and wherein at least one data variable of the one or more data variables comprises an array representing frequency domain received idle channel noise information.
 - 2. A transceiver capable of receiving test information over a communication channel using multicarrier modulation comprising:

 a receiver portion capable of receiving a message, wherein the message comprises one or more data variables that represent the test information, wherein bits in the message were



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