From: Taylor, David <dtaylor@exegy.com> **Sent:** Tuesday, December 15, 2020 8:50 PM

To: Thomas, Michael

Cc: Cutler, Matthew; Franklin, Charlie; MTGroup

Subject: RE: '115 IPR

Attachments: Parsons - Signed documents.pdf; Whatley, J. - Signed documents.pdf; Gyang - signed

documents.pdf

EXTERNAL EMAIL

Part 2.

From: Taylor, David

Sent: Tuesday, December 15, 2020 8:49 PM

To: 'Thomas, Michael'

Cc: Cutler, Matthew; Franklin, Charlie; MTGroup

Subject: RE: '115 IPR

Attached are the HR agreements for the inventors (in 2 parts due to size).

From: Thomas, Michael <<u>mthomas@hdp.com</u>>
Sent: Friday, December 11, 2020 8:00 PM
To: Taylor, David <<u>dtaylor@exegy.com</u>>

Cc: Cutler, Matthew <mcutler@HDP.com>; Franklin, Charlie <cfranklin@hdp.com>; MTGroup@HDP.com>

Subject: RE: '115 IPR

David,

This looks promising, as we need to establish item 2 or 3, in addition to item 1. I look forward to hearing about the employment documents.

Regards, Mike



Michael J. Thomas | Principal O | 314.446.7640 M | 314.503.9506

Patent, Trademark & Copyright Law



To ensure proper processing, please also send all matter-related emails to MTGroup@hdp.com.

From: Taylor, David < dtaylor@exegy.com Sent: Friday, December 11, 2020 6:25 PM
To: Thomas, Michael < mthomas@hdp.com>

Subject: RE: '115 IPR
EXTERNAL EMAIL
Mike,
Please see comments below.
David
From: Thomas, Michael < <u>mthomas@hdp.com</u> > Sent: Friday, December 11, 2020 11:58 AM To: Taylor, David < <u>dtaylor@exegy.com</u> > Cc: Cutler, Matthew < <u>mcutler@HDP.com</u> >; Franklin, Charlie < <u>cfranklin@hdp.com</u> >; MTGroup < <u>MTGroup@HDP.com</u> > Subject: '115 IPR
David,
Further to our discussion yesterday, we would like to investigate the following:
1. The '115 patent is based on a provisional application filed Dec 15, 2008. The Parsons '675 application (which matured into the '046 patent) was published about two months earlier, on Oct 2, 2008. Does Exegy have any evidence (such as documents or emails, including draft invention disclosures) demonstrating all features of challenged claims 43 and 44 (reproduced below) were mentally conceived, or reduced to practice, on or before Oct 2, 2008?[DET] We absolutely do.
2. The '115 patent lists six inventors: you, Parsons, Whatley, Bradley, Gyang and DeWulf. Were all six inventors obligated (by written agreement or otherwise) in 2008 to assign their patent rights in the '115 invention to Exegy?
3. Was the subject matter recited by challenged claims 43 and 44, and any related disclosure in the Parsons '675 application, mentally conceived entirely by you and Parsons (the only inventors listed on the '115 patent and the Parsons '675 application)? To prove this (if true), we will want to obtain signed declarations from all six inventors of the '115 patent.

Challenged claims 43 and 44:

43. An apparatus for applying specific computer technology to reduce latency and increase throughput with respect to streaming data enrichment, the apparatus comprising:

a coprocessor that includes an order engine and a price engine;

wherein the coprocessor is configured to receive streaming data representative of a plurality of limit order events pertaining to a plurality of financial instruments;

wherein the order engine is configured to (1) access a plurality of limit order records based on the streaming limit order event data, and (2) compute updated limit order data based on the accessed limit order records and the streaming limit order event data;

wherein the price engine is configured to (1) access a plurality of price point records based on the streaming limit order event data, and (2) compute updated price point data based on the accessed price point records and the streaming limit order event data;

wherein the coprocessor is further configured to enrich the streaming limit order events with financial market depth data based on the computed updated limit order data and price point data; and

wherein the order engine and the price engine are configured to perform their respective operations in parallel with each other as the limit order event data streams through the coprocessor.

44. The apparatus of claim 43 wherein the coprocessor comprises a member of the group consisting of a reconfigurable logic device, a chip-multi-processor (CMP), and a graphics processing unit (GPU), and wherein the order engine and the price engine are deployed on the member.

Thanks, Mike

> Michael J. Thomas Attorney at Law, Principal

Office: 314.446.7640

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St. Louis, MO 63105

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