

**UNITED STATES BANKRUPTCY COURT
EASTERN DISTRICT OF MISSOURI
EASTERN DIVISION**

In re:

PATRIOT COAL CORPORATION, *et al.*,

Debtors.

**Chapter 11
Case No. 12-51502-659
(Jointly Administered)**

**DECLARATION OF DANIEL BRASSIL IN SUPPORT OF JOINT MOTION OF
THE DEBTORS AND THE OFFICIAL COMMITTEE OF UNSECURED
CREDITORS TO COMPEL PRODUCTION OF DOCUMENTS
BY PEABODY ENERGY CORPORATION**

Daniel Brassil declares as follows:

1. I am a Principal Consultant for H5, a company with offices in New York, New York and San Francisco, California that specializes in information retrieval for the legal industry. Since 1999, H5 has helped corporations and law firms customize protocols to help meet their document search, review, and analysis obligations in connection with litigation, investigations, and related legal information management needs. H5 addresses its clients' discovery obligations by combining professional expertise in linguistics, statistics, computer science, law, information technology, process engineering, and e-discovery with advanced proprietary technology. H5's principled approach adheres to The Sedona Conference recommended best practices and the National Institute of Standards and Technology Text Retrieval Conference protocols. My curriculum vitae is annexed hereto as Exhibit 1.

2. I respectfully submit this declaration based upon personal knowledge, in

support of the Debtors' and Creditor Committee's Joint Motion to Compel the Production of Documents.

3. I have reviewed the transcript of the status hearing in this matter held on August 20, 2013. At the hearing, Mr. Newman, counsel for Peabody Energy Corporation, described the search terms that were negotiated among the parties as "horribly broad" and "very, very complicated." Tr. at 74-75. He asserted that "[w]e knew they would bring back a whole lot of material, including material that would not be responsive." *Id.* at 75. He also stated that "the search terms, which we -- as I say, we knew we were going to produce way, way more than what would be properly responsive here." *Id.* at 78.

4. Mr. Newman's statements reflect a misunderstanding of the search terms. I was involved in the negotiation of those terms, beginning with their initial drafting and then consulting in connection with virtually every round of negotiation that followed. The search terms were created and refined using a rigorous methodology of mapping the requests for production to core concepts and then pairing those concepts using conceptual anchors and syntax consistent with leading approaches in the information-retrieval discipline. The search terms that were ultimately agreed upon, with their compound structure involving proximity connectors and concept pairing, are carefully crafted to *reduce* the amount of over-capture from the document population by identifying documents that are more likely to be responsive. The search terms may appear "complex," but that complexity creates a more precise search of the document population and produces a *smaller* set of documents for review. In my experience, use of "simple" search terms, such as those typically created by attorneys who do not have expertise in search and retrieval methodologies, results in a far broader capture of documents and therefore increases the burden of review for the producing party.

5. Moreover, because the search terms are designed to find documents that are likely to be responsive to the concepts called for in the document requests, the review process that

will follow is likely to proceed more quickly and efficiently. For example, instead of searching in a simple fashion for all documents containing the name of a relevant entity, the search terms are intended to capture relevant concepts. The burden of reviewing documents that have been identified by relevant concepts is less than reviewing documents identified by simpler search terms because the responsiveness decisions are likely to be made more quickly.

Pursuant to 28 U.S.C. §1746, I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed this 29th day of August, 2013.

/s/ Daniel Brassil

Daniel Brassil

EXHIBIT 1

Curriculum Vitae

Dan Brassil

208 NW 22nd Street
Wilton Manors, FL 33311
(415) 490-6298
dbrassil@h5.com

EDUCATION

- March 2001 M.A. in Linguistics
University of California, San Diego
- March 1997 B.A. with Honors in Language Studies
University of California, Santa Cruz

RELEVANT EXPERIENCE

- 2005 to present Principal Consultant
H5, San Francisco
Provide expertise in linguistics and information retrieval to corporations and law firms needing assistance meeting their legal discovery, compliance and information management needs.
- 1999 to 2005 Instructor
Linguistics Department, University of California, San Diego
Created and taught a variety of undergraduate- and graduate-level linguistic theory/practice courses as well as Italian language courses, including:
- *Morphology* (Spring 2005)
 - *Field Methods: Vietnamese* (Winter/Spring 2004)
 - *The Structure of Chinese* (Fall 2003)
 - *Slang: An Introduction to Linguistics* (Fall 2000)
 - First-year Italian Grammar and Conversation (Fall 1998 to Winter 2005)
- 2001 to 2005 Language-proficiency Tester
Center for Teaching Development, University of California, San Diego
Screened foreign graduate students who wished to be employed as teaching assistants. Assessed English oral/aural competence and overall language proficiency including: pronunciation, grammar, speech flow, vocabulary and organization.
- 2003 Analyst
Space and Naval Warfare Systems Center, San Diego
Assisted in developing technologies for identification of place-name references in unstructured text and evaluating information extraction and text summarization technologies.

PUBLICATIONS

Automation of Legal Sensemaking in e-Discovery, with C. Hogan and R. Bauer in *Artificial Intelligence and Law*, Volume 18, Number 4. Netherlands. 2010

Human-Aided Computer Cognition for e-discovery, with C. Hogan and R. Bauer in *Proceedings of the 12th International Conference on Artificial Intelligence and Law*. 2009

Impedance Matching of Humans to Machines in Hi-Q Information Retrieval Systems, with R. Bauer, C. Hogan, J. Seely Brown and G. Taranto in *Proceedings of the 2009 IEEE International Conference on Systems, Man, and Cybernetics*. 2009

The Centrality of User Modeling to High Recall with High Precision Search, with S. Attfield and C. Hogan in *Proceedings of the 2009 IEEE International Conference on Systems, Man, and Cybernetics*. 2009

Human-Aided Computer Assessment for Exhaustive Search, with C. Hogan and M. Marcus in *Proceedings of the 2009 IEEE International Conference on Systems, Man, and Cybernetics*. 2009

H5 at TREC 2008 Legal Interactive: User Modeling, Assessment and Measurement, with. C. Hogan, S. Rugani, J. Reinhart, M. Gerber and T. Jade in *The 17th Annual Text Retrieval Conference (TREC 2008) Proceedings*. 2009

Patterns in Kirundi Reduplication. *San Diego Linguistics Papers*, Issue 1. 2003

On the distribution of the Definiteness Effect in Spanish. *Proceedings of the 38th Chicago Linguistics Society Conference: Main Session*. 2002

PRESENTATIONS

- 2013 Toward a Meaningful E-Discovery Standard: On the Place of Measurement in an E-Discovery Standard. Presented at Discovery of Electronically Stored Information Workshop V. Rome, Italy
- 2013 What is Technology-Assisted Review ? (panelist). Technology-Assisted Review: A Critical Analysis. Duke Law Center for Judicial Studies. Washington D.C.
- 2012 Harnessing Search Technology Effectively (panelist). LegalTech New York. New York
- 2011 Non-linear Document Review: What the Buzz is About! (panelist). Association of Litigation Support Professionals, Chicago Chapter. Chicago, IL.
- 2010 A Middle Voice in Appalachian English. Presented at Linguistics Society of America 84th Annual Meeting. Baltimore, MD.
- 2009 E-Discovery: An Emerging Field and its Opportunities for Linguists (panelist). Linguistics Society of America. Berkeley, CA.
- 2009 Buyer Beware: How TREC Can Help You Evaluate Your E-Discovery Investment (panelist). H5 Webinar. San Francisco
- 2008 H5 at TREC 2008 Legal Interactive: User Modeling, Assessment and Measurement. Presented at The 17th Annual Text Retrieval Conference. Gaithersberg, Maryland
- 2004 Mandarin and Vietnamese Compounds: Realizational Morphology and Linearization. Presented at Workshop on East Asian Linguistics 12, University of California, Los Angeles

- 2004 Mandarin Discourse Adjectives. Presented at Workshop on East Asian Linguistics 12, University of California, Los Angeles (with G. Taranto)
- 2004 Gradients in Mandarin imperfective particle selection. Presented at Linguistic Society of America 78th Annual Meeting, Boston
- 2003 Synthetic and Periphrastic expressions in Mandarin Verbal Morphology. Presented at Linguistic Society of America 77th Annual Meeting, Atlanta
- 2002 On the distribution of the Definiteness Effect in Spanish. Presented at Chicago Linguistics Society 38, University of Chicago
- 2002 Periphrasis, Standard Lexicalism and Realizational Lexicalism. Presented at Linguistic Symposium on Romance Languages 32, University of Toronto
- 2002 Italian auxiliary selection as morphological blocking. Presented at Workshop on Periphrasis and Paradigms, University of California, San Diego
- 2000 Kirundi Reduplicated Adjectives: Is the OCP at work? Presented at 31st Annual Conference of African Linguistics, Boston University

AWARDS AND FELLOWSHIPS

- 2003 Foreign Language and Area Studies Summer Fellowship
Council on East Asian Studies, University of California, San Diego
- 2003 Dissertation Fellowship
Linguistics Department, University of California, San Diego
- 2003 Teaching Assistant Excellence Award
Linguistics Department, University of California, San Diego
- 2001 Innovation in Teaching Award
Linguistics Department, University of California, San Diego
- 1998 Humanities Fellowship
Linguistics Department, University of California, San Diego

LANGUAGES

Native English
Fluent Italian
Intermediate Mandarin
Elementary Japanese
Read French and Spanish