THE USE OF ARTIFICIAL INTELLIGENCE (AI) IN TRADEMARK PROCEEDINGS

EMERGING ISSUES COMMITTEE

ARTIFICIAL INTELLIGENCE AND TRADEMARKS SUBCOMMITTEE

21 APRIL 2021

New York | Beijing | Brussels | Washington, D.C. | Singapore | Santiago

PowerfulNetworkPowerfulBrands®

USE OF AI IN LEGAL PROCEEDINGS IN THE UNITED STATES

Artificial Intelligence ("AI") has been used in adversarial proceedings, such as litigation, for years. This is particularly true in the United States where the litigation process involves extensive discovery and AI has been utilized by litigants and the Courts to streamline the discovery process and control the costs associated with the production, redaction, and review of, depending on the litigation, millions of pages of documents[1].

AI has provided several tools that have been utilized in the litigation process, including: Technology Assisted Review (TAR), often referred to as e-discovery, document coding, assistance with aspects of legal research, predictive analytics, computer generation of documents, and work automation and process improvement. For example, it is now commonplace for litigants to use TAR to review documents prior to production to the opposing party. With keywords, TAR may assist a party in locating relevant documents that are responsive to discovery requests and may assist with the redactions of portions that are not relevant and/or are immune from the discovery process based on a claim of work product or privilege.

The U.S. Courts have paid close attention to AI issues as they relate to litigation proceedings as well. Throughout the evolution of AI, the Courts have considered whether AI tools would effectively facilitate discovery in the given circumstances. Such issues include whether predictive coding would be a reasonable means to enhance discovery efforts,[1] whether TAR is an appropriate tool to use for document review[2] and whether TAR would reduce the cost of litigation[3]. The Courts in the U.S. have come out in support of the use of AI and have often revered it as increasing the efficiency and decreasing the cost of U.S. litigation. In fact, it is common to find standing orders in U.S. Courts related to how to conduct discovery on Electronically Stored Information (ESI) and how to utilize search terms and/or TAR. The former Chief Judge of United States Court of Appeals for the Federal Circuit, Chief Judge Randall Radar, participated in an e-discovery committee and produced "An E-Discovery Model Order" which addresses*, inter alia,* the use of keywords and concerns regarding privilege waiver to reduce the cost associated with pre-production review by human reviewers.[4]

In summary, AI has taken on a prominent role in U.S. Court proceedings. In subsequent sections of this report, we will further consider how AI has been used in proceedings in jurisdictions other than the U.S. and how AI may be used outside the discovery process to assist litigators and trademark practitioners in opposition and other contentious administrative proceedings. This includes a review of recent and ongoing developments in the areas of legal analytics, predictive tools, and document generation. A further aspect still to be explored concerns the potential downfalls to using AI to

---

[1] *See i.e., United States of America et. al. Vs Education Management LLC et. al. (*W.D. Pa) (Nov. 24, 2013)

[2] *See i.e., Rio Tinto PLC v. Vale S.A., et al*., No. 1:14-cv-03042-RMB-AJP – Opinion and Order (March 2, 2015)

[3] *B&R Supermarket, Inc. v. VISA, Inc*. (D. N. Cal. 2016).

[4] *An E-Discovery Model Order*, available at http://www.cafc.uscourts.gov/sites/default/files/announcements/Ediscovery_Model_Order.pdf.

assist in the litigation process. For example, AI teams / vendors have been building models that may assist in predicting the outcomes of pending cases. If successful, could this be used as a tool for litigators to use prior to litigation to determine how certain arguments or case themes may be received at trial? A further question to be addressed would be if, even with the AI technology that has been used in Court proceedings, such as TAR, there ethical implications for attorneys relying on technology to perform functions previously performed by humans.

USE OF AI IN LEGAL PROCEEDINGS OUTSIDE OF THE UNITED STATES

While AI has become a facet in legal proceedings in the United States, our research has shown that most jurisdictions outside of the United States have not employed AI to the same extent.

To explore the extent AI has been used in legal proceedings around the globe, we conducted interviews with trademark professionals in a random group of jurisdictions. This research revealed that use of AI in legal proceedings is not widespread globally. However, the topic is more often the subject of discussions. Common-law jurisdictions, such as the United States and Australia, where the discovery stage of legal proceedings involves the analysis and classification of a large volume of documents, seem more prone to adopting or considering the adoption of AI-based tools to execute or at least support the execution of such tasks.

In other jurisdictions there seems to be an awareness that AI may in the future play a significant role in legal proceedings. Yet, it is still unclear how and when this will happen. In this section, we will provide a brief discussion of the use of AI in legal proceedings (or considerations thereof) in Europe, India, and Australia.

On a separate note, the line between automation or digitalization and AI sometimes still appears blurred. AI has become a kind of buzzword which occasionally is inadequately used in “common language” as a synonym for the use of computer systems to perform or support the execution of tasks that are normally accomplished by the human brain. In considering these issues in the future, it would be beneficial to decide to what extent this distinction may not only still be unclear, but also if any terminological misunderstandings can be identified, in particular, when interviewing third parties who do not have an IT-background, in order to increase terminological accuracy.

EUROPE

The use of AI in legal proceedings in Europe seems to be dependent on three considerations that still require in-depth multi-disciplinary analysis. The first question is the objective question regarding what is technologically possible today and what may become possible in the near future. To the extent the technology is or becomes available, the additional questions would be: what is desirable (e.g. considering cost-benefit aspects or potential professional liability issues) and what is allowed (e.g. considering ethical aspects) when exploring the use of AI in legal proceedings, whether by the parties in the proceedings or by the judiciary.

The complexity of the subject and the inevitable tension between what is (or may become) possible and what is desirable and / or allowed has led the European Commission of the Efficiency of Justice (CEPEJ) of the Council of Europe to lay down five ethical principles relating to the use of AI in judicial systems. These principles, embodied in the European Ethical Charter on the use of AI in Judicial Systems, are the following:

1. Principle of respect of fundamental rights: ensuring that the design and implementation of artificial intelligence tools and services are compatible with fundamental rights;
2. Principle of non-discrimination: specifically preventing the development or intensification of any discrimination between individuals or groups of individuals;
3. Principle of quality and security: regarding the processing of judicial decisions and data, using certified sources and intangible data with models conceived in a multi-disciplinary manner, in a secure technological environment;
4. Principle of transparency, impartiality, and fairness: making data processing methods accessible and understandable, authorizing external audits;
5. Principle “under user control”: precluding a prescriptive approach and ensuring that users are informed actors and in control of their choices.

Source: CEPEJ European Ethical Charter on the use of artificial intelligence (AI) in judicial systems and their environment (coe.int)

INDIA

India has not yet employed the use of AI in legal proceedings. Rather, from our research, the use of AI in the India court system is still in the exploratory stage. The discussions relating to the use of AI technology have centered on the ability to increase efficiency in the India court system and reduce backlog.

Unlike the United States and Australia, legal professionals have not explored the use of AI to assist in the litigating of matters, such as in the discovery process. India has implemented the discovery process following in the United Kingdom in the new Commercial Courts Act 2015, which was enacted in 2016. Therefore, it is premature for parties in India to effectively utilize AI in the discovery process.

There have been similar discussions in India related to the use of AI by the Intellectual Property Office to reduce the backlog of opposition matters at the Trademark Office and to assist with prior art searches at the Patent Office. However, these discussions are also in the exploratory stage.

Our research also has not uncovered any use of AI in legal proceedings or IP Offices in the Indian sub-continent such as in Pakistan, Sri Lanka, Nepal, Bangladesh, and Bhutan.

AUSTRALIA

Australia's use of AI in legal proceedings appears to be quite similar to that of the United States. Like the United States, Australia litigations include extensive discovery proceedings which often include the production of a large volume of documents. Law firms have begun to use AI tools to increase efficiency when sorting through what could be millions of pages of documents.

For example, attorneys in a proceeding may code a subset of documents by marking which documents may be most useful for a particular topic based on a phrase or key term. AI tools can then analyze that subset of documents and learn to pull key phrases out of relevant documents. While this has been seen to be helpful, it is not done without attorney oversight and therefore while it may provide valuable assistance to the attorneys litigating the matter, it does not eliminate the need for human document review.

Legal professionals in Australia have also explored the use of AI to assist with trademark submissions. For example, for clients with large trademark portfolios where the marks and/or description of goods/services may be similar, an AI tool is used to analyze past trademark submissions. The AI tool "reviews" the refusals, responses, and success/failures for each of those applications and provides information regarding which arguments are likely to be most successful in a given circumstance and provides suggestions for descriptions of goods/services to avoid similar refusals in the future.

USE OF AI IN PRE-LITIGATION TASKS

While the discussion surrounding the application of AI in legal proceedings is still a forward-looking one, our research identified certain current practices in the pre-litigation phase regarding the automation of the assessment of the prospects of success of legal claims by legal services providers. This is the case in matters allowing standardized analysis of fact, such as, for example, customer protection claims against airlines, insurance claims and possibly other areas of law favoring mass litigation.

To what extent such standardization might also be applicable to trademark claims, e.g. the review of the so-called “watching notices” and the assessment of the prospects of opposition proceedings, while there are indeed already certain technologies that might substitute or at least support the manual human work in such matters, the question that is still unanswered is whether any individual user (e.g. a law firm or even a large corporation) would cross the threshold of cases required to justify the investment in such tools.

While the subcommittee has not explored this topic, another application of AI relating to legal proceedings may involve the use of AI tools by litigation funding groups. We could envision the use of AI to assess risks and assist litigation funding groups in determining whether to take on certain potential matters.

APPENDIX A

Case Title	Court	Relevant Text
Deutsche Bank National Trust Co. v. Decision One Mortgage Co., LLC, No 13 L 5823, 2014 WL 764707 (Jan. 28, 2014)	Circuit Court of Cook County, Illinois County Department, Law Division	"Finally, the parties are further encouraged to satisfy their discovery obligations, in a manner that is agreeable, efficient and effective. If the parties **agree** that **predictive coding** would be appropriate in this case, they are encouraged to employ that tool."
In Re: Biomet M2a Magnum Hip Implant Products Liability Litigation (Mdl 2391) Cause No. 3:12-Md-2391 (Dec. 19, 2013)	United States District Court, Northern District of Indiana, South Bend Division	"I might need to decide issues about electronically stored Biomet records from before 2009, such as what Biomet must do to retrieve them and how they will be filtered for discoverable matter. In furtherance of that goal, I will enter a separate order providing an expedited procedure for resolving discovery disputes that the parties find they can't resolve."
United States of America et. al. Vs Education Management LLC et. Al. (Nov. 24, 2013)	United States District Court for the Western District of Pennsylvania	"CAR, also known as "predictive coding," relies on "sophisticated algorithms to enable the computer to determine relevance, based on interaction with (i.e., training by) a human reviewer." CAR search programs may offer a simple "yes/no" regarding relevance, or may offer a scaled relevance score. If the program offers a score, the human reviewers may elect to review and documents with a stated degree of relevance. Predictive coding appears to offer a reasonable means by which Defendants may enhance the efficiency of their discovery efforts. At least one case has considered CAR and approved of its use. [See Moore v. Publicis Groupe, 287 F.R.D. 182 (S.D.N.Y. 2012)] In that case, however, the parties worked together to determine the custodians to which the CAR would be applied and the protocol which would be used by the CAR program. While Defendants have not detailed the precise method by which their chosen CAR vendor will assess their document collections, Defendants are clear that they are using CAR only to "prioritize documents for review". "Indeed, the use of CAR in this case appears to be an effective method of streamlining the vast quantity of documents to be reviewed in this case. Granting one party the authority to unilaterally determine the method through which CAR may be employed with the effect of excluding certain documents would run counter to the purposes of and need for cooperative discovery."

Case Title	Court	Relevant Text
In Re: Biomet M2a Magnum Hip Implant Products Liability Litigation (Mdl 2391) (Aug 13, 2013)	United States District Court, Northern District of Indiana, South Bend Division	"The Steering Committee wants Biomet to produce the discoverable documents used in the training of the "predictive coding" algorithm. Biomet reveals only that the discoverable documents used in the seed set already have been disclosed to the Steering Committee; Biomet won't identify the seed set beyond that. Without knowing the training documents, the Steering Committee says, it can't intelligently propose more search terms, since it doesn't know what already has been included in the search. Biomet says nothing in the law requires it to provide what the Steering Committee seeks. As I understand it, a predictive coding algorithm offers up a document, and the user tells the algorithm to find more like that document or that the user doesn't want more documents like what was offered up. The Steering Committee wants the whole seed set Biomet used for the algorithm's initial training. That request reaches well beyond the scope of any permissible discovery by seeking irrelevant or privileged documents used to tell the algorithm what not to find. That the Steering Committee has no right to discover irrelevant or privileged documents seems self-evident."
Gordon v. Kaleida Health, 08-CV-378S, 2013 WL 225056 (W.D.N.Y. May 21, 2013)	United States District Court, Western District of New York	The court expressed dissatisfaction with the parties' lack of progress toward resolving issues related to completion of review and production of Defendants' e-mails using the key-word search method, and pointed to the availability of predictive coding, a computer assisted ESI reviewing and production method directing the parties' attention to the recent decision of Magistrate Judge Peck in Moore v. Publicis Groupe & MSL Group, 287 F.R.D. 182 (S.D.N.Y. 2012), approving use of predictive coding in a case involving over 3 million e-mails. In a September 7, 2012 e-mail, after informing Plaintiffs that Defendants intended to use predictive coding, Defendants objected to Plaintiffs' ESI consultants participating in discussions with Defendants relating to the use of predictive coding and establishing a protocol. Plaintiffs contend that where a party intends to use predictive coding to assist in the review and production of ESI, it is necessary that the parties negotiate a protocol to guide the use of predictive coding software for the case.

Case Title	Court	Relevant Text
		Plaintiffs' Memorandum citing Moore v. Publicis Groupe & MSL Group, 287 F.R.D. 182, 185 (S.D.N.Y. 2012) (Peck, M.J.) (where use of predictive coding is challenged court may require requesting party obtain documents that were used by producing party to "train" the computer assisted coding system). In Moore, the court noted that "'[electronic discovery requires cooperation between opposing counsel and transparency in all aspects of preservation and production of ESI." More particularly, Plaintiffs maintain Defendants' position excludes Plaintiffs' access to important information regarding Defendants' selection of so-called "seed set documents" which are used to "train the computer" in the predictive coding search method. Defendants object to Plaintiffs' use of D4's ESI consultants on the ground that Plaintiffs' ESI consultant, D4, LLC3 ("D4") had previously provided services to Defendants in this case. Further, Defendants assert that courts do not order parties in ESI discovery disputes to agree to specific protocols to facilitate a computer-based review of ESI based on the general rule that ESI production is within the "sound discretion" of the producing party. Defendants' Memorandum quoting Ford Motor Co. v. Edgewood Props., 257 F.R.D. 418, 427-28 (D.N.J. 2009). Defendants point to several considerations that warrant the exercise of caution in directing production of ESI. Defendants further contend that in Moore, the court did not direct defendants in that case to provide plaintiffs with the "seed set documents" defendants intended to use in connection with predictive coding, rather, defendants volunteered to provide such data. Plaintiffs also point to Local Rule of Civil Procedure 26(f)(3) which, in cases involving ESI discovery, requires the parties "discuss and attempt to reach agreement as to the method of searching.

Case Title	Court	Relevant Text
		Plaintiffs request that, in the event the court does not grant Plaintiffs' motion, Defendants be reminded of the possibility that upon Plaintiffs' further motion, the court may find Defendants' ESI search methodology to be unreasonable and thus, non-compliant with Defendants' production obligations in accordance with Fed.R.Civ.P. 34 Based on Defendants' expressed awareness of Defendants' discovery obligations the court also need not, as Plaintiff's request, remind Defendants of relevant considerations regarding Defendants' use of predictive coding regarding ESI document production obligations under Fed.R.Civ.P. 34(a).
Matthew Edwards, Georgia Browne, Torah Montessori School v. National Milk Producers Federation, No. 311-cv-04766 (N.D. Cal., Apr. 17, 2013)	United States District Court, Northern district of California San Francisco division	"The Parties have discussed the methodologies or protocols for the search and review of documents collected from Land O'Lakes and have agreed that Land O' Lakes will utilize Recommind's Axcelerate software for its review workflow and production in this case. Axcelerate incorporates predictive coding (also known as technology-assisted review) functionality, which Land O'Lakes will leverage for a more cost efficient and higher quality review. review. The Parties agree that the following protocol will be followed to identify potentially responsive documents for review: Step 1 to 6 enlisted following an order mandating both parties to follow the steps."
Chevron Corporation v. Steven Donzinger, No. 11cv0691, 2013 WL 1087236 (S.D.N.Y. Mar. 15, 2013)	United States District Court Southern District Of New York	At the September 2012 hearing, the court urged the parties to analyse, in their subsequent submissions with respect to burden, whether and to what extent predictive coding could "reduce the burden and effort" required to comply with the Subpoena. **Footnote**: Predictive coding is an automated method that credible sources say has been demonstrated to result in more accurate searches at a fraction of the cost of human reviewers. See e.g., Moore v. Publicis Groupe, 287 F.R.D. 182, 191 (S.D.N.Y. 2012) adopted sub nom. Moore v. Publicis Groupe SA, 11 Civ. 1279 ALC AJP, 2012 WL 1446534 (S.D.N.Y. Apr. 26, 2012) ("Computer-assisted review appears to be better than the available alternatives, and thus should be used in appropriate cases."); DI 713, at 9; Joe Palazzolo, How a Computer Did the Work of Many Lawyers, WSJ LAW BLOG, Jan. 17, 2013.

Case Title	Court	Relevant Text
Monique Da Silva mMore, et al. Vs Publicis Groupe & msl group	US District Court Southern District of NY	Gender discrimination case; Judge Andrew J. Peck overall friendly toward use of computer assisted coding as a method to review documents to help "*secure the just, speedy, and inexpensive*" determination of cases in our e-discovery world, provided the opposite party is informed and in agreement. The objective of review in e-discovery is to identify as many relevant documents as possible, while reviewing as few non-relevant documents as possible. Case with 40Mio documents. This Opinion appears to be the first in which a court has approved of the use of computer-assisted review. "*That does not mean computer-assisted review must be used in all cases, or that the exact ESI protocol approved here will be appropriate in all future cases that utilize computer-assisted review. Nor does this Opinion endorse any vendor (the Court was very careful not to mention the names of the parties' vendors in the body of this Opinion, although it is revealed in the attached ESI Protocol), nor any particular computer-assisted review tool. What the Bar should take away from this Opinion is that computer-assisted review is an available tool and should be seriously considered for use in large-data-volume cases where it may save the producing party (or both parties) significant amounts of legal fees in document review. Counsel no longer have to worry about being the "first" or "guinea pig" for judicial acceptance of computer-assisted review. As with keywords or any other technological solution to e-discovery, counsel must design an appropriate process, including use of available technology, with appropriate quality control testing, to review and produce relevant ESI while adhering to Rule 1 and Rule 26(b) (2)(C) proportionality. Computer assisted review now can be considered judicially-approved for use in appropriate cases."*
Global Aerospace Inc. et al Vs. Landow Aviation, L.P., d/b/a Dulles Jet Center et al	Circuit Court for Loudoun County (Virginia)	Approved use of predictive coding for discovery (processing and production of electronically stored information) with the caveat that the receiving party may raise an issue as to the completeness or the contents of the production or the ongoing use of predictive coding.

Case Title	Court	Relevant Text
National day laborer Organizing network, center for Constitutional rights, and Immigration justice clinic of The benjamin n. Cardozo School of Law Vs United states Immigration and Customs enforcement agency, United States Department of Homeland security, Executive Office for immigration review, Federal bureau of Investigation, and office of Legal counsel	US District Court Southern District of NY	Lawsuit brought against various governmental agencies for the purpose of obtaining documents under the FOIA. Document disclosure results depend on search criteria (keywords, misspellings etc.). Knowing which criteria were applied is essential to assess the adequacy of the search and of the results. There is a *"need for careful thought, quality control, testing, and cooperation with opposing counsel in designing search terms or 'keywords' to be used to produce emails or other electronically stored information. And beyond the use of keyword search, parties can (and frequently should) rely on latent semantic indexing, statistical probability models, and machine learning tools to find responsive documents. Through iterative learning, these methods (known as "computer-assisted" or "predictive" coding) allow humans to teach computers what documents are and are not responsive to a particular FOIA or discovery request and they can significantly increase the effectiveness and efficiency of searches. In short, a review of the literature makes it abundantly clear that a court cannot simply trust the defendant agencies' unsupported assertions that their lay custodians have designed and conducted a reasonable search. The more complicated question is this: when custodians do keep track of and report the search terms that they have used, how should a court evaluate their adequacy? As the cases cited by the parties show, the evaluation of search terms is highly context-specific: the failure to use certain search terms will sometimes be fatal, sometimes unproblematic, and sometimes improper but harmless or at least mitigated."*
In Re: Actos (Pioglitazone) Products Liability Litigation This Document applies to: All Cases	US District Court Western District of Louisiana	Case Management Order: Protocol relating to the production of electronically stored information; no waiver of attorney-client privilege.
Kleen Products Llc, et al. individually and on behalf of all those similarly situated vs. Packaging corporation of America, et al	US District Court Northern District of Illinois Eastern Division	Agreement settling dispute on ESI methodology.

Case Title	Court	Relevant Text
Eorhb, inc., a Georgia corporation, and Coby g. Brooks, Edward j. Greene, james p. Creel, carter b. Wrenn and Glenn g. Brooks, each as personal Representatives and trustees of the estate of Robert h. Brooks Vs. Vcl Hoa holdings llc, a Delaware limited Liability company, and Hoa Restaurant Group, llc, a delaware LLC	Court of Chancery of the State of Delaware	"I would like you all to talk about a single discovery provider that could be used to warehouse both sides' documents to be your single vendor. Pick one of these wonderful discovery superpowers that is able to maintain the integrity of both side's documents and ensure that no one can access the other side's information. If you cannot agree on a suitable discovery vendor, you can submit names to me and I will pick one for you. This seems to me to be an ideal non-expedited case in which the parties would benefit from using predictive coding. I would like you all, if you do not want to use predictive coding, to show cause why this is not a case where predictive coding is the way to go."
Gail Hinterberger, Beverly Weisbecker, Cynthia williams and marcia carroll, on Behalf of themselves and all other employees similarly Situated Vs. Catholic health systems, inc., et al	US District Court, Western District of NY	Reply Memorandum Of Law In Further Support Of Plaintiffs' Motion To Compel. "Defendants have no excuse for refusing to engage in meaningful meet and confer discussions with plaintiffs and plaintiffs' ESI consultant regarding ESI issues, and their refusal to do so is a violation of this Court's Local Rules. It is patently false for defendants to claim that they "have long voiced their objections to Plaintiffs using D4 as an expert consultant in this litigation" when the exact opposite is true. Defendants knowingly and willingly engaged in ESI conferrals with plaintiffs' ESI consultant, D4, for the past year without raising any objection to plaintiffs or the Court until approximately one month ago. Defendants have therefore waived any right to object at the last minute, just prior to the deadline for ESI discovery, to plaintiffs' use of D4 as their ESI consultant in this case."

Case Title	Court	Relevant Text
Seth Harris, Acting Secretary of Labor, United States Department of Labor Vs Subcontracting Concepts, Llc	US District Court, Norther District of NY	"Although this Court may not share the technological sophistication of Mr. Wise, I certainly know that the amount of time, cost, and effort expended to produce these records from the computer is significantly less than by hand. With the advent of software, predictive coding, spreadsheets, and similar advances, the time and cost to produce large reams of documents can be dramatically reduced. Further, suggesting to DOL to accept the production of these documents in either native format, or through a zip file, or some other electronic transaction should minimize SCI LLC's anxiety. Hence, the Court is more convinced than ever that SCI LLC is not subject to an overwhelming and incomprehensible burden."
Chevron Corporation v. Andres Snaider, No. 14-cv-01354-RBJ-KMT (Jan. 15, 2015)	United States District Court for the District of Colorado	The Petitioner advanced six subpoenas vis-à-vis to obtain discovery of about Respondent's activities. The Respondent tried to resist such discovery requests by alleging that imposed a substantial burden on him. However, the Court highlighted that "general assertions of undue burden and expense are insufficient alone to foreclose discovery; especially when, as here, the discovery is highly relevant to the issues faced by the party to foreign litigation. Snaider bears the burden to show that responding to the discovery requests at issue would be unduly burdensome" (citing Klesch & Co. v. Liberty Media Corp., 217 F.R.D. 517, 524 (D.Colo.2003)). Footnote: "[…] Snaider does not address the likelihood that in a case such as this computer-assisted review would no doubt be invoked, and while that is costly, it is much more efficient than assigning individuals to review a large volume of paperwork".

Case Title	Court	Relevant Text
Rio Tinto PLC v. Vale S.A., et al., No. 1:14-cv-03042-RMB-AJP – Opinion and Order (March 2, 2015)	United States District Court Southern District of New York	The Court highlighted that it was well-established court practice to let parties decide freely and without any restriction which instrument use to respond to discovery. In this sense, the Judge approved a party's request to use coding, the court will approve it. In this regard, "it is now black letter law that where the producing party wants to utilize TAR for document review, courts will permit it". Indeed, "the technology industry now considers predictive coding to be widely accepted or limiting e-discovery to relevant documents and effecting discovery of ESI without an undue burden". On the other hand, the Court emphasised that one TAR issue that remained open was how transparent and cooperative the parties need to be with respect to the seed or training sets. The Judge concluded that, based on relevant case law, where the parties did not agree on transparency, the decisions were split and the debate in the discovery literature is robust. Finally, "one point must be stressed – it is inappropriate to hold TAR to a higher standard than keywords or manual review. Doing so discourages parties from using TAR for fear of spending more in motion practice than the savings from using TAR for review".
Theresa Malone (individually and on behalf of Blue Valley Food Inc.) et al. v. Kantner Ingredients, Inc., et al., No. 4:12-cv-03190-JMG-CRZ – Memorandum and Order (March 31, 2015)	United States District Court for the District of Nebraska	Plaintiff requested the defendant to produce lots of documents and e-mails to support his argument. As Plaintiff claimed that defendant failed to produce all documents responsive to Plaintiff's discovery requests, defendants allowed Plaintiff to "see for themselves" whether any additional document was missing. After Plaintiff's check, he offered evidence of mistakes made during defence counsel's 2012 manual review of the electronic files. The Court noted that "manual review is still considered by many as the "gold standard" for electronic document review. But human error is common when attorneys are tasked with personally reviewing voluminous electronically stored information" (the Court recalls "The Sedona Conference Best Practices Commentary on the Use of Search and Information Retrieval Methods in E-Discovery, Public Comment Version, 8 Sedona Conf. J. 189, 2041 – August 2007).

Case Title	Court	Relevant Text
		Footnote n. 7: "Predictive coding is now promoted (and gaining acceptance) as not only a more efficient and cost-effective method of ESI review, but a more accurate one".
Eurkert Boardley, et al., v. Household Finance Corporation III, et al., Case No. PWG-12-3009 – Memorandum Opinion (June 1, 2015)	United States District Court for the District of Maryland	After the Court granted to the Plaintiff two previous opportunities to amend to amend to address pleading deficiencies identified by the Defendant, the first decided to deny the third motion to amend, received by the Plaintiff (otherwise, "the issues would never be joined, discovery would remain open indefinitely, and, […] the suit would devolve into an endless series of complaints, demurrers, and responsive complaints"). Thus, the Court released a scheduling order: in this regard, he admitted the filing of ESI; if parties intend to resort to e-discovery, they have to review the Suggested Protocol for Discovery of Electronically Stored Information. In addition, the Court released a Discovery Order, that governed discovery (concerning also ESI) in that case. In this regard, following paragraphs establishes specific rules for ESI: (i) Paragraph n. 6b – "Requests for production of documents"; (ii) Paragraph 7b – "Duty to Preserve Evidence, including ESI, that is Relevant to the Issues that Have Been Raised by the Pleadings"; and (iii) Paragraph 9 – "Non-Waiver of Attorney-Client Privilege or Work Product Protection".
Charles. T. Burd, et al. v. Ford Motor Company, Case No. 3:13-cv-20976 – Memorandum Opinion and Order (July 8, 2015)	United States District Court for the Southern District of West Virginia	In the present case, the Parties mutually agreed upon using e-discovery methods. Nonetheless, they questioned about the reasonableness of the searches they both made. More specifically, the Plaintiff expressed doubts – several times – about the self-selection process used by the Defendant to collect relevant documents. Therefore, the Court compelled the Parties several times to meet, confer and agree on search terms, thus to overcome these obstacles and to start discovery phase. Notwithstanding such push from the Court, the Parties continued to face several difficulties in reaching an agreement on keywords and phrases to search the ESI and such hurdles persisted from July 2014 until June 2015.

Case Title	Court	Relevant Text
		After such period, the Plaintiff presented the Court with a motion to quash and for protective order, as well as a motion for reconsideration. After having analysed the relevant legislation on the matter (i.e., Federal Rule of Civil Procedure 26(b)(1) – 26(b)(2)(C)), the Court fostered that the Parties act in a transparent and collaborative way, also in a pre-discovery phase. In this regard, it ordered "the parties to continue streamlining the process with agreed-upon search terms and phrases as previously instructed". Moreover, the Court ordered the parties to "involve their IT experts and to consider other methods of searching such as predictive coding; making use of the publications of the Sedona Conference. *See, e.g.,* Sedona's Commentary on Achieving Quality in the E-Discovery Process (2013), Best Practices Commentary on the Use of Search & Information Retrieval Methods in E-Discovery (2013), and Commentary on Proportionality in Electronic Discovery (2013).
Phyrro Investments Limited and MWB Business Exchange Limited v. MWB Property Limited et al., Case No. HC-2014-000038 (February 16, 2016)	High Court of Justice – Chancery Division	The court was called upon to decide whether approving the use in the case of predictive coding. The court took into consideration the following elements: • features of the disclosure process; • rules governing the disclosure process (i.e., CPR Part 31 and its Practice Directions); • features of predictive coding; and • relevant case law dealing with predictive coding. Based on the above, the court concluded that there were no reasons which might impede the use of predictive coding in such case, and factors in favour were the following: • experience in other jurisdictions (citing US Federal Court case of Moore v. Publicis Groupe, 11 Civ 1279 (ALC) (AJP); Irish High Court in Irish Bank Resolution Corporation Ltd v. Quinn [2015] IEHC 175); • there is no evidence that use of predictive coding leads to less accurate disclosure; • it is assured greater consistency in using a computer than dozens or hundreds of lower-grade fee-earners;

Case Title	Court	Relevant Text
		• there is nothing in the CPR or in Practice Directions to prohibit the use of predictive coding; • the number of electronic documents is huge; • the costs of manually searching these documents would be enormous; • the costs of using predictive coding are surely cheaper; • the estimated costs of using the software are proportionate to the value of the claims; • there is time to consider other disclosure methods if predictive coding would be unsuccessful; and • the parties have agreed upon the use of software.
David Brown v. BCA Trading Limited, Robert Feltham and Tradeouts Limited, Case No. CR-2016-000997, (May 17, 2016)	High Court of Justice – Chancery Division – Company Court	A disputed matter between the Parties was whether electronic disclosure by the Respondents should be provided, as they asked, using predictive coding or via a more traditional keyword approach instead. In this regard, the First Respondent argued that predictive coding is the most reasonable and proportionate method of disclosure and that there were significant differences in costs between traditional keyword methods and predictive coding. The judge noted that "when the size of potential disclosure is significant both in terms of quantity of documents and the time required to be spent on disclosure process, it is particularly important for the lawyers to identify by reference to the true issues, the anticipated categories of documents and to enter into discussions to seek to minimise the work required and therefore the costs". Moreover, "a successful outcome from the use of predictive coding must, at least to some extent, depend upon the success of the parties having been able first to narrow down the issues and therefore the categories/types of documents relevant to the disclosure process". Thus, the court affirmed that the first stage of the disclosure process was that the parties narrowed the issues and the types of documents relevant for such process. To this end, it was important to comply with (i) the Protocol proposed by the Technology and Construction Court; as well as with (ii) the CPR PD 31B, para. 8 and 9.

Case Title	Court	Relevant Text
		The second stage had to concern the identified documents to be disclosed: on such basis, the Court concluded that, based on the costs of disclosure, "predictive coding must be the way forward. There is nothing, yet, to suggest that predictive coding will not be able to identify the documents which would otherwise be identified through, for example, keyword and, more importantly, with the full cost of employees / agents having to carry out extensive investigations as to whether documents should be disclosed or not". To reach such conclusion, the Court took into consideration not only costs' benefits but also other elements (e.g., experience in other jurisdictions and no prohibition in the CPR or Practice Directions), cited within Pyrroh Investment Ltd. [2016] EWHC 256 (Ch).

Bair Hugger forced air warming products liability litigation, MDL No. 15-2666 – Pretrial Order No. 12 (July 8, 2016)	United States District Court of Minnesota	In this case, the Parties reached an agreement on the Protocol providing for the procedures meant to govern the CAR for ESI during the pendency of the present litigation.
		
		More specifically, the Protocol provides for rules concerning the following issues:
		• Data Sources: they have to be mutually agreed upon the Parties;
		• Computer assisted review: the Parties are allowed to use CAR (including Predictive Coding), but both of them retain the right to make reasonable inquiries concerning the adequacy and the success of the other's process.
		• The Parties have agreed upon a protocol for the review and production of documents using CAR, which concerns the following issues:
		  ○ Documentation of the CAR Start-up Process;
		  ○ Training Methodology;
		  ○ Privileged Documents;
		  ○ Documents not suitable for CAR;
		  ○ Training Targets;
		  ○ Use of Exemplars and Remediation: in this regard, the Parties will use prior predictive coding to other mechanisms such as keyword search;
		  ○ Measurements and Documentation: it comprises audit of the results of the predictive coding.

Case Title	Court	Relevant Text
Dynamo Holdings Limited Partnership, Dynamo, GP, Inc., Tax Matters Partner, et al. v. Dynamo Holdings Limited Partnership, Dynamo, GP, Inc., Tax Matters Partner, et al.,	US Tax Court, Washington, DC (2016)	The Commissioner brought a motion to compel further production of documents after Plaintiff responded to discovery requests using predictive coding. The Commissioner's motion claims the production was incomplete. The court denied the Commissioner's motion stating: "There is no question that petitioners satisfied our Rules when they responded using predictive coding. Petitioners provided the Commissioner with seed sets of documents from the backup tapes, and the Commissioner determined which documents were relevant. That selection was used to develop the predictive coding algorithm. After the predictive coding algorithm was applied to the backup tapes, petitioners provided the Commissioner with the production set. Thus, petitioners satisfied our Rules with their response. Petitioners made a reasonable inquiry in responding to the Commissioner's discovery demands when they used predictive coding to produce any documents that the algorithm determined was responsive, and petitioners' response was complete when they produced those documents."
Pauline Hyles c. New York City, et al	U.S. Dist. S. D. NY (2016)	Defendant wanted to use keyword searching instead of TAR. Plaintiff noted that " The Court noted: TAR is cheaper, more efficient, and superior to keyword searching. (See 7/18/16 Ltr. at 2, 4, 5.) In March 2009, the "dark ages" in terms of eDiscovery advances, this Court described problems with keywords and the need for "careful thought, quality control, testing, and cooperation with opposing counsel in designing search terms or 'keywords.'" William A. Gross Constr. Assocs., Inc. v. Am. Mutual Mfrs. Ins. Co., 256 F.R.D. 134, 134 (S.D.N.Y. 2009) (Peck, M.J.). Further elaborating on the deficiencies of keyword searching, my seminal Da Silva Moore decision in 2012 approved the use of predictive coding, aka TAR, in appropriate cases. Da Silva Moore v. Publicis Groupe, 287 F.R.D. 182, 190-91, 193 (S.D.N.Y. 2012) (Peck, M.J.). In again approving the use of TAR in 2015, I wrote that "the case law has developed to the point that it is now black letter law that where the producing party wants to utilize TAR for document review, courts will permit it.

Case Title	Court	Relevant Text
		The Court concluded: "To be clear, the Court believes that for most cases today, TAR is the best and most efficient search tool. That is particularly so, according to research studies (cited in Rio Tinto), where the TAR methodology uses continuous active learning ("CAL"), which eliminates issues about the seed set and stabilizing the TAR tool. The Court would have liked the City to use TAR in this case. But the Court cannot, and will not, force the City to do so. There may come a time when TAR is so widely used that it might be unreasonable for a party to decline to use TAR. We are not there yet. Thus, despite what the Court might want a responding party to do, Sedona Principle 6 controls. Hyles' application to force the City to use TAR is DENIED."
B&R Supermarket, Inc. v. VISA, Inc.	U.S. Dist. N. Cal. (2016)	This is an order to govern the discovery of electronically stored information ("ESI"). Here, the Court encouraged the use of technology-assisted review (TAR) as a mechanism to reduce costs and burden to the parties and stated: "To reduce the costs and burdens of document review and production, any party may use predictive coding or technology-assisted review for the purpose of culling the documents to be reviewed or produced. Any party using predictive coding or technology-assisted review("TAR") to cull the documents to be reviewed agrees that as early as reasonably practicable (and in any event prior to using such tools) it will disclose to the opposing parties the type of technology it will be using and a general description of the TAR methodology that will be used."
In re: Viagra (Sildenafil Citrate) Products Liability Litigation	N. Dist. Cal. (2016)	The Court issued an Order regarding Electronically Stored Information after a dispute arose between the parties with respect to the methods to be used to search ESI. Here, the Court, relying on the *Hyles* case (discussed above) declined to require the parties to use predictive coding but recognized that predictive coding is more efficient and a better method stating:

Case Title	Court	Relevant Text
		"Even if predictive coding were a more efficient and better method, which Pfizer disputes, it is not clear on what basis the Court could compel Pfizer to use a particular form of ESI, especially in the absence of any evidence that Pfizer's preferred method would produce, or has produced, insufficient discovery responses. Therefore, the Court HEREBY DENIES Plaintiff's motion. The parties shall use Pfizer's proposed language in paragraph 6 of the stipulated order. This Order is without prejudice to revisiting this issue if Plaintiff contends that Pfizer's actual production is deficient."
McConnell Dowell Constructors v. Santam Ltd.	Supreme Court of Victoria at Melbourne (Australia) (2016)	The Australian Court approved of the use of TAR when the parties recognize that the use of TAR will reduce the burden of review when a large volume of documents is at issue. The parties cited several other Australian decisions to support the use of TAR.
FCA US LLC v. Cummins, Inc.	U.S. Dist. E. D. Mi. (2016)	The parties brought a discovery dispute regarding the use of TAR. The Court found: "Applying TAR to the universe of electronic material before any keyword search reduces the universe of electronic material is the preferred method. The TAR results can then be culled by the use of search terms or other methods. Accordingly, the Court shall enter FCA's proposed order."
Steve Rabin, et al v. Price Waterhousecoopers LLP.	U.S. Dist. N. D. Ca. (2017)	The Court accepted the proposition that predictive coding significantly expedited the production process and stated that "the court will not set a lengthy schedule based on the possibility of future problems that have yet to arise, particularly given Defendant's claim that the 'TAR process is capable of achieving an exceptionally high level of accuracy.'"
Janell Winfield, Tracey Stewart, and Shauna Noel v. City of New York	U.S. Dist. S. D. N.Y. (2017)	The court agreed with the use of predictive coding but required in camera submissions to reveal the predictive process and training stating "While it is true that Plaintiffs here do not have clear insight into the City's predictive coding process and training, this Court has required the City to provide in camera submissions

Case Title	Court	Relevant Text
		addressing these subjects. These in camera submissions reveal that the City appropriately trained and utilized its TAR system. The City's seed set included over 7,200 documents that were reviewed by the City's document review team and marked as responsive or nonresponsive in order to train the system."
In re Broiler Chicken Antitrust Litigation	U.S. Dist. N. D. Ill (2018)	The Court issued an Order Regarding Search Methodology for Electronically Stored Information. In the Order, the Court set a protocol to guide the parties through the discovery process including notably stating "without micromanaging how the producing Party meets its discovery obligations and without requiring the disclosure of attorney work product or other privileged information, the Parties will endeavor to be reasonably transparent regarding the universe of documents subject to targeted collections or culling via search terms and/or TAR/CAL."
Entrata, Inc. v. Yardi Systems, Inc.	U.S. Dist. Utah (2018)	Yardi brought a motion requesting, *inter alia,* the court to compel production of TAR information from Entrata. The Court was unwilling to order Entrata to produce such information without a detailed explanation as to why production of Entrata's TAR information is needed and/or specific deficiencies in Entrata's document production.
City of Rockford v. Mallinckrodt ARD Inc. and MSP Recovery Claims Services LLC v. Mallinckrodt ARD Inc.	U.S. Dist. N. D. Ill (2018)	The Court issued an Order Establishing Production Protocol for Electronically Stored Information. In the Order, the Court recognized the efficiency of using predictive coding and stated "With the advent of TAR and improvements made to that process, there appears to be a growing chorus that key word searching is not best practices, and that TAR is the way to go. Many trusted ESI experts – and courts – understandably sing the praises of TAR, especially its ability to scientifically quantify the successfulness of gathering and producing relevant documents."
Aurora Cooperative Elevator Co. v. Aventine Renewable Energy	United States District Court For The District Of Nebraska (2014)	The plaintiff's Motion to Compel Aventine to Search for and Produce Email Records, (Filing No. 104), is granted under the terms discussed on the record, (Filing No. 146), and as set forth in this order. Discovery will be conducted in stages beginning with the primary issue defined as follows:

Case Title	Court	Relevant Text
		Whether the Aurora West Ethanol Plant was ready for start-up, fully operational, and capable of producing 110 million gallons of ethanol per year as of July 1, 2012. For at least this first discovery stage, the parties shall consult with a computer forensic expert to create search protocols, including predictive coding as needed, for a computerized review of the parties' electronic records. It is highly foreseeable that the forensic expert will need to confer with not only the parties' counsel, but representatives of the parties to develop an accurate and predictable search protocol. Assuming this occurs, all statements (whether written or oral) made by the parties' representatives during their discussions and conference on developing electronic discovery plans or protocols are deemed confidential and shall not be admissible in evidence for any reason in the trial of this case. The confidentiality afforded under this provision does not preclude admissibility of the information disclosed by the party representatives if: i. the information was also disclosed or discovered outside the context of the parties' electronic discovery conference and discussions; and/or ii. the parties' statements are relevant on issues unrelated to the underlying merits of this case, such as a motion for sanctions or for assessment and allocation of the costs and attorney fees incurred in locating and producing electronic discovery.
Independent Living Center of Southern California v. City of Los Angeles	United States District Court Central district of California (2014)	The primary area of contention has been electronically stored information. Defendant City of Los Angeles has approximately 2,000,000 documents that it needs to search to respond to Plaintiffs' requests for production. Obviously, this cannot be done manually and must be accomplished by using computer assisted technology. After months of haggling, the parties attempted to use key word searches to search through the documents of two of the City's 24 custodians. Those searches identified approximately 24,000 relevant documents. Assuming that key word searches were used for the other 22 custodians and that similar numbers of documents were tagged (minus duplications), it is likely that more than 150,000 documents and more likely 250,000 documents would have been tagged for production. This would have resulted in both sides spending tremendous amounts of time and money going through those documents. In lieu of key work searches, the Court ordered the City to use predictive coding to locate the most relevant documents. To do this, the City was forced to hire an outside vendor at an

Case Title	Court	Relevant Text
		initial cost of more than $50,000 to search its electronic records. The goal was to have the vendor load the 2,000,000 documents into a computer platform and, after training the computer as to what was important, having the computer rank the documents in order of relevancy. The Court ordered that, after the computer ranked the documents, the City would be required to produce the 10,000 most relevant documents to Plaintiffs.
Bridgestone-vs-IBM	United States District Court Middle District of Tennessee, Nashville division (2016)	In the final analysis, the uses of predictive coding is a judgment call, hopefully keeping in mind the exhortation of Rule 26 that discovery be tailored by the court to be as efficient and cost-effective as possible. In this case, we are talking about millions of documents to be reviewed with costs likewise in the millions. There is no single, simple, correct solution possible under these circumstances. The Magistrate Judge will permit Plaintiff to use predictive coding on the documents that they have presently identified, based on the search terms Defendant provided. The Magistrate Judge believes that he is, to some extent, allowing Plaintiff to switch horses in midstream. Consequently, openness and transparency in what Plaintiff is doing will be of critical importance. Plaintiff has advised that they will provide the seed documents they are initially using to set up predictive coding. The Magistrate Judge expects full openness in this matter.
Dynamo Holdings v. Commâr	United States Tax Court (2014)	We find a potential happy medium in petitioners' proposed use of predictive coding. Predictive coding is an expedited and efficient form of computer-assisted review that allows parties in litigation to avoid the time and costs associated with the traditional, manual review of large volumes of documents. Through the coding of a relatively small sample of documents, computers can predict the relevance of documents to a discovery request and then identify which documents are and are not responsive. The parties (typically through their counsel or experts) select a sample of documents from the universe of those documents to be searched by using search criteria that may, for example, consist of keywords, dates, custodians, and document types, and the selected documents become the primary data used to cause the predictive coding software to recognize patterns of relevance in the universe of documents under review. The software distinguishes what is relevant, and each iteration produces a smaller relevant subset and a larger set of irrelevant documents that can be used to verify the integrity of the results. Through the use of predictive coding, a party responding to discovery is left with a smaller

Case Title	Court	Relevant Text
		set of documents to review for privileged information, resulting in a savings both in time and in expense. The party responding to the discovery request also is able to give the other party a log detailing the records that were withheld and the reasons they were withheld. "This judicial opinion now recognizes that computer-assisted review is an acceptable way to search for relevant ESI in appropriate cases." Moore v. Publicis Groupe, 287 F.R.D. 182, 183 (S.D.N.Y. 2012), adopted sub nom. Moore v. Publicis Groupe SA, No. 11. Civ. 1279 (ALC)(AJP), 2012 WL 1446534 (S.D.N.Y. Apr. 26, 2012). Respondent asserts that predictive coding should not be used in these cases because it is an "unproven technology". We disagree. Although predictive coding is a relatively new technique, and a technique that has yet to be sanctioned (let alone mentioned) by this Court in a published Opinion, the understanding of e-discovery9 and electronic media has advanced significantly in the last few years, thus making predictive coding more acceptable in the technology industry than it may have previously been. In fact, we understand that the technology industry now considers predictive coding to be widely accepted for limiting e-discovery to relevant documents and effecting discovery of ESI without an undue burden.[1°]
Smilovits-v-First-Solar	United States District Court District of Arizona (2014)	Defendants' Response to Extraneous Issues Raised by Plaintiffs. Finally, plaintiffs assert that defendants' use of a "trained" predictive coding system "obviates" the burden of adding additional custodians. Plaintiffs disregard the need to retrain the predictive coding software whenever new documents are added to the database. That retraining includes the creation of new baseline and validation sets of 4,000-5,000 documents in total. All of these documents are then reviewed by senior attorneys for responsiveness. The algorithms in the software are also updated to incorporate the results of that review. As defendants pointed out at the September 18 discovery hearing, the output from the predictive coding software is only the beginning of the process. Documents identified by the system need to be reviewed
Good v. American Water Works	United States District Court Southern District of West Virginia (2014)	In fact, Plaintiffs can see no very good reason for any kind of privilege review at all prior to production, but are willing to agree to computer-assisted searches and other machine-based privilege reviews as a compromise because those are unlikely to result in any significant delays. If the Defendants are worried about the sanctity of privileged and work product

Case Title	Court	Relevant Text
		documents, rather than the practical effect of their momentary disclosure, then they are going to take reasonable steps to protect the sanctity of those documents anyway, and therefore they do not need any greater clawback protection than that provided by F.R.E. 502(b). Inasmuch as defendants' cautious approach is not prohibited by the text of Rule 502, and they appear ready to move expeditiously in producing documents in the case, their desired approach is a reasonable one. (See Defs.' Reply at 2 ("Defendants have every reason to implement efficient review techniques and avoid the high costs of manual privilege review for all but the most sensitive document categories")).
Green v. American-Modern Home Insurance Company	United States District Court Western District of Arkansas, Texarkana division	Before the Court is the parties' Joint Motion for Entry of Agreed Order Establishing Protocol for Production of Electronically Stored Information. (ECF No. 27). The parties, through counsel, have agreed to the form and entry of this Order ("ESI Order") establishing a protocol for the production of Electronically Stored Information ("ESI") in this matter. The Court finds that the parties' Motion should be GRANTED.