

Artificial Intelligence Ethics Rules IP Practitioners Should Consider

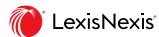
March 14, 2024

Presented By:

David V. Dilenschneider, Esq.
Client Relations Consultant
LexisNexis Intellectual Property Solutions



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The Manure Spreader

Who invented it?



Artificial Intelligence

Who invented the manure spreader?



Joseph Oppenheim, an educator, invented the modern widespread manure spreader that made farming less labor-intensive and far more efficient in the early 20th century ¹. He is the only person honored for that invention in the Ohio Agricultural Hall of Fame in Columbus, Ohio ². Oppenheim was born on March 1, 1859, in the small village of Kirchhundem, Kingdom of Prussia. He obtained a liberal education at universities in Bonn, Germany, and Innsbruck, Austria, and upon graduation from college at the age of 20 he immigrated to the United States ¹. He received a teaching degree in 1881 from St. Francis College in Wisconsin and after briefly teaching in Putnam County, Ohio, he returned to St. Francis College for further study. On August 9, 1883, he married Anna Mary Ellerbrock of Glandorf, Ohio ¹. Oppenheim was "an accomplished musician, specializing in piano and pipe organ, ... a remarkable scholar, conversant with four languages. well read in literature. and



Modern Widespread Manure Spreader

Inventor: **Joseph Oppenheim**

Joseph Oppenheim

From Wikipedia, the free encyclopedia

Joseph Oppenheim (March 1, 1859 – November 24, 1901) was an educator who invented the modern widespread manure spreader that made farming less labor-intensive and far more efficient in the early 20th century,^[1] and only he is honored for that invention in the Ohio Agricultural Hall of Fame in Columbus, Ohio.^[2]

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- 1 Early Life and Teaching Career
- 2 Educator Turns Inventor
- 3 Oppenheim's New Idea manure spreader
- 4 Rapid Growth of The New Idea Company
- 5 Sources
- 6 List of References



A manure spreader

Early Life and Teaching Career [edit]

Born on March 1, 1859 in the small village of [Kirchhundem](#), [Germany](#). Oppenheim obtained a liberal education at universities in [Bonn](#), Germany, and [Innsbruck](#), Austria,^[3] and upon graduation from college at the age of 20 he immigrated to the United States. He received a teaching degree in 1881 from St. Francis College in Wisconsin and after briefly teaching in Putnam County, Ohio, he returned to St. Francis College for further study. On August 9, 1883 he married Anna

Modern Widespread Manure Spreader

Original Patent

UNITED STATES PATENT OFFICE.

JOSEPH OPPENHEIM, OF MARIA STEIN, OHIO.

MANURE DISTRIBUTER AND SPREADER.

SPECIFICATION forming part of Letters Patent No. 648,519, dated May 1, 1900.

Application filed February 17, 1900. Serial No. 5,641. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH OPPENHEIM, a citizen of the United States, residing at Maria Stein, in the county of Mercer and State of Ohio, have invented certain new and useful Improvements in Manure Distributers and Spreaders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

In the class of machines for distributing fertilizer of the character of manure or compost the ground is enriched to the extent only of the width of the wagon-body or other de-

tures of the invention are necessarily susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal section of a manure-distributer, showing the spreader in position. Fig. 2 is a top plan view thereof. Fig. 3 is a view similar to Fig. 2 of a modification.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The machine may be of any construction generally utilized for distributing compost, manure, or like fertilizer, and comprises a

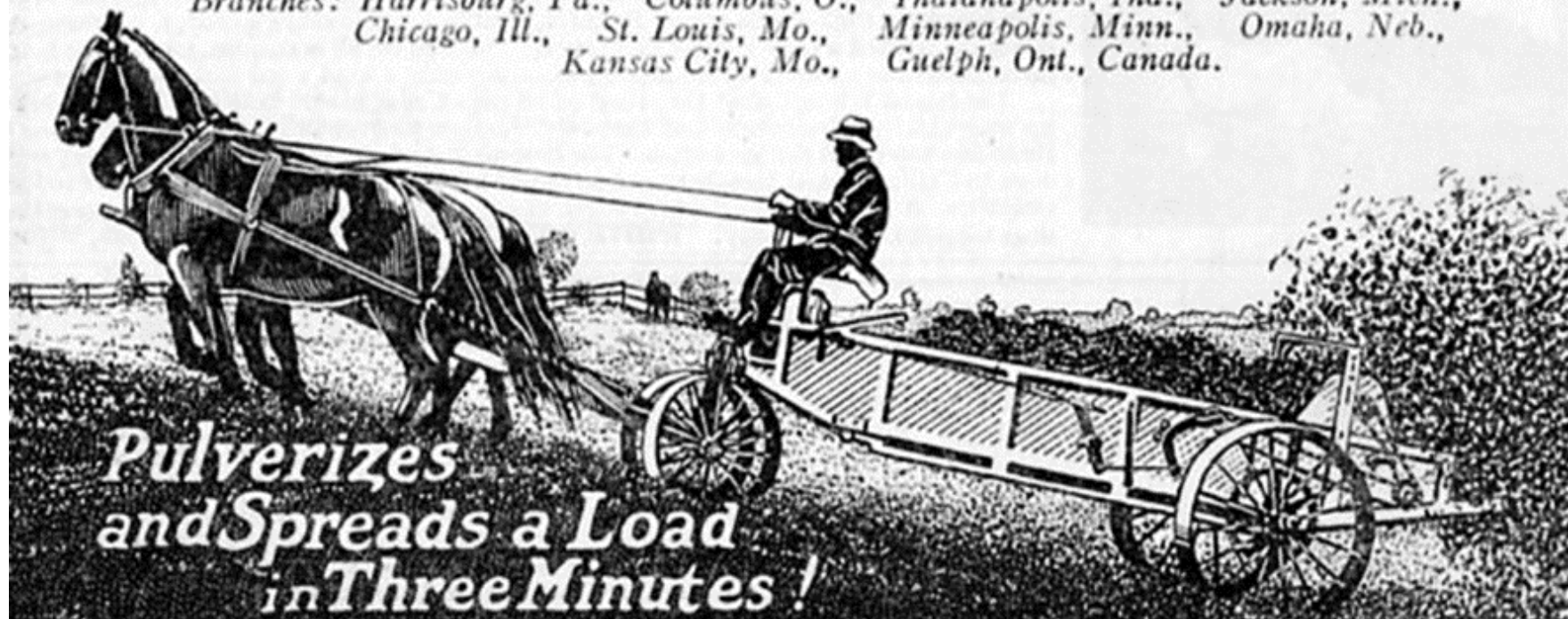
NEW IDEA SPREADER CO.

Built by "Spreader Specialists"

Main Office and Factory

Coldwater, Ohio

*Branches: Harrisburg, Pa., Columbus, O., Indianapolis, Ind., Jackson, Mich.,
Chicago, Ill., St. Louis, Mo., Minneapolis, Minn., Omaha, Neb.,
Kansas City, Mo., Guelph, Ont., Canada.*



***Pulverizes
and Spreads a Load
in Three Minutes!***







Agenda

- What Is Artificial Intelligence?
- Ethics Rule: 1.3 (Diligence)
- Ethics Rule: 1.4 (Communications)
- Ethics Rule: 1.6 (Confidentiality of Relationship) and its Comment 19
- Ethics Rule: 2.1 (Advisor)
- Ethics Rules: 5.1 & 5.3 (the Supervision rules)
- Ethics Rule: 1.1 (Competence) and its Comment 8
- Sanctions (e.g., under F.R.C.P. 11) & Other Consequences
- Benefits and Risks of Artificial Intelligence (Generally)
- I.P. Platforms Using Artificial Intelligence: Look for Maximum Benefits & Minimal Risks

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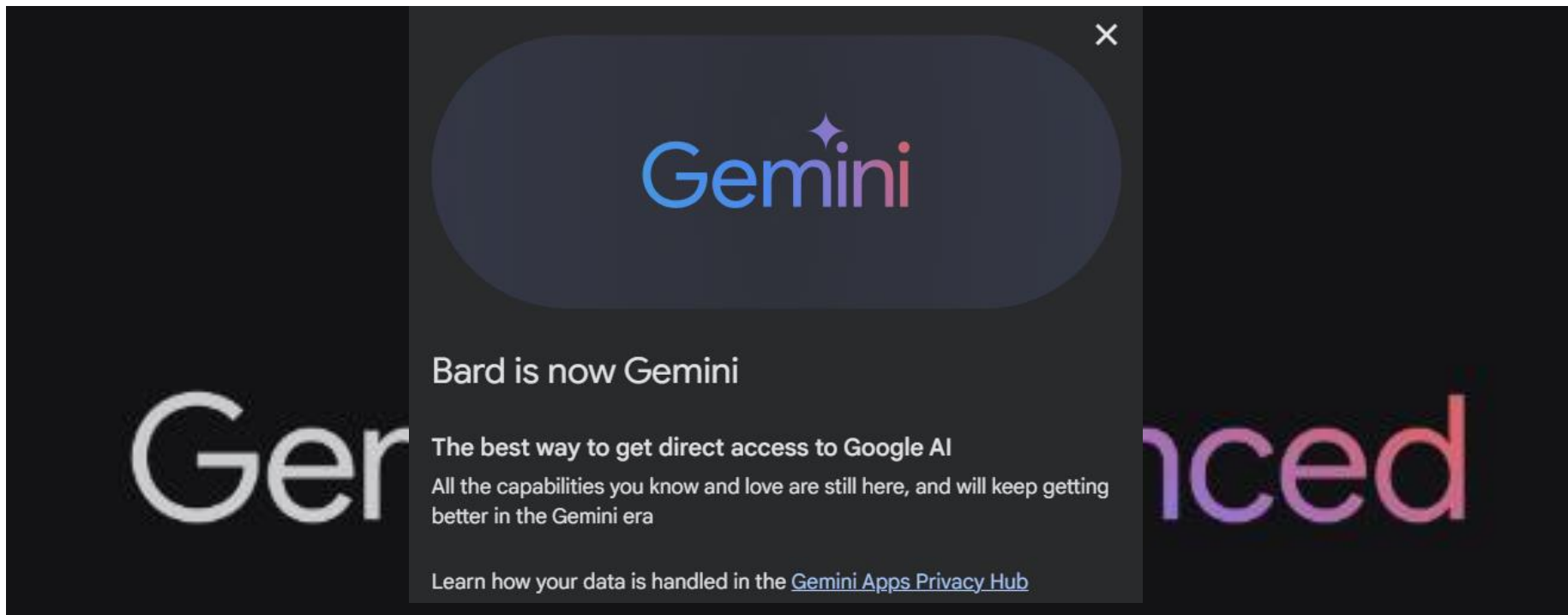
I prepared these materials in early-to-mid February.

It is quite possible that these materials are now dated, as the world of A.I. is rapidly changing.

So, consider what follows as “high level” thinking – but not necessarily the state of the world of A.I. as of March 14, 2024.

Artificial Intelligence

Constantly-Changing / -Developing / Features, Abilities . . . and even Branding & Names



Technology

One of the Biggest Challenges Facing Firms and Practitioners



Artificial Intelligence

Defined

“Artificial intelligence (AI) is the theory and development of computer systems capable of performing tasks that historically required human intelligence, such as recognizing speech, making decisions, and identifying patterns. AI is an umbrella term that encompasses a wide variety of technologies[.]”

The Coursera logo is displayed in a bold, blue, lowercase sans-serif font.

Artificial Intelligence

Difference between Artificial Intelligence and Generative Artificial Intelligence

“Generative artificial intelligence (Gen AI) is AI that can generate novel content by utilizing existing text, audio, or images. Traditional AI systems are primarily used to analyze data and make predictions while Gen AI goes a step further by creating new data like its training data.”



Source: “5 Litigation and AI Trends to Watch in 2024,” UnitedLex (2024)

Artificial Intelligence

Difference between Artificial Intelligence and Generative Artificial Intelligence

“Machine learning imbues computer systems with the ability to learn from data and improve their performance without being explicitly programmed. Generative AI, which evolved from machine learning, can generate new data, such as images, video, audio text or computer code, from existing data.

* * *

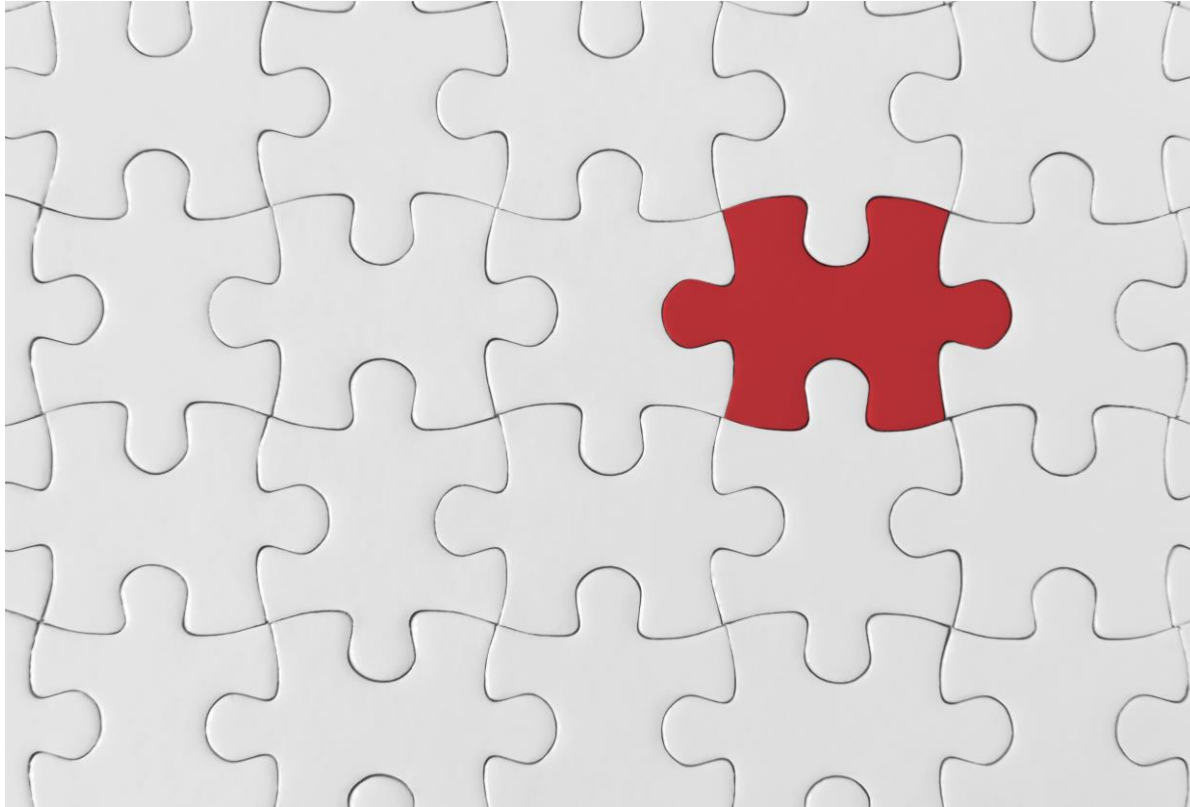
Language modeling, or LM, is a subset of generative AI, and uses various statistical probabilistic techniques to predict a given sequence of words occurring in a sentence. . . . Large language models (LLMs) refer to the size of the text data, i.e., massively large data sets are used.”

Source: “The Ethics and Regulation of AI,” ABA Law Practice Magazine, Jayne R. Reardon & Tom Martin (January 1, 2024)



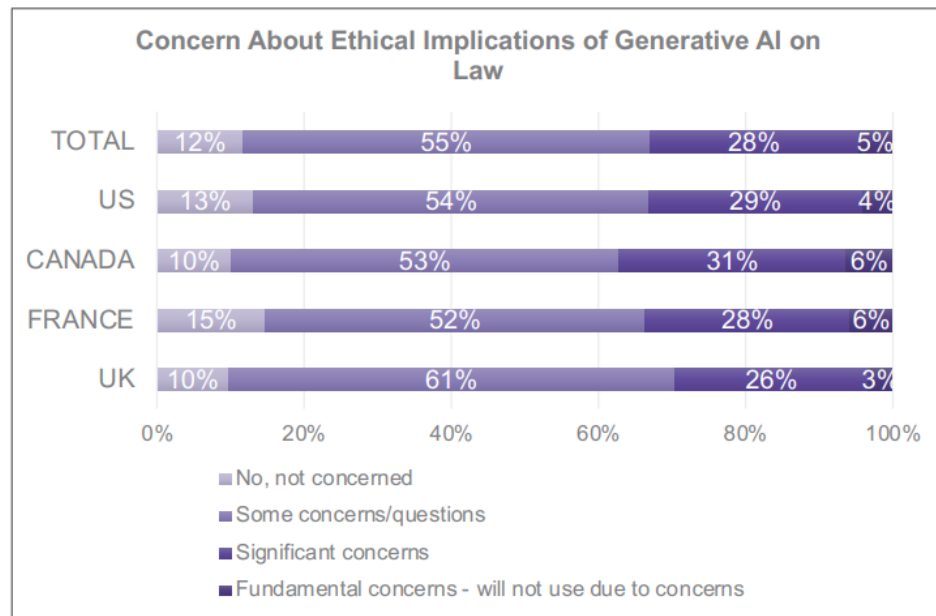
Artificial Intelligence

Artificial Intelligence Could Be the Missing Piece in Your Practice



Artificial Intelligence

Practitioners' Ethics-Related Concerns about Generative Artificial Intelligence



“A very high percentage of lawyers (88%) have at least some concerns about the ethical implications of generative AI on the practice of law, with a third citing significant or fundamental concerns regarding ethical implications. These concerns underscore the need for trusted providers of generative AI tools in the legal market.”

Source: “International Legal Generate AI Report,” LexisNexis (August 22, 2023)

Artificial Intelligence

The Legal Profession's Ethical Responsibilities

“Everyone in, or headed into, the legal profession has, or will have, ethical duties to diligently learn about AI and its underlying technologies to become sufficiently competent and stay that way.”

Source: “AI, on the Law of the Elephant: Toward Understanding Artificial Intelligence,” 69 Buffalo L. Rev. 1389, Emile Loza De Siles (December 2021)

Artificial Intelligence

Potentially-Applicable Ethics Rules

1.3 (“Diligence”)

1.4 (“Communications”)

1.6 (“Confidentiality of Relationship”)

2.1 (“Advisor”)

5.1 & 5.3 (the Supervision rules)

ABA Model Rule of Professional Conduct 1.3

Diligence

“A lawyer shall act with reasonable diligence and promptness in representing a client.”



ABA Model Rule of Professional Conduct 1.4(a)(2)

Communications

“(a) A lawyer shall: . . . (2) reasonably consult with the client about the means by which the client’s objectives are to be accomplished.”



ABA Model Rule of Professional Conduct 1.6*

Confidentiality of Relationship

“(a) A lawyer shall not reveal information relating to the representation of a client unless the client gives informed consent.

• * *

(c) A lawyer shall make reasonable efforts to prevent the inadvertent or unauthorized disclosure of, or unauthorized access to, information relating to the representation of a client.”

** Same duty is owed to a **prospective** client (per ABA Model Rule 1.18)*



ABA Model Rule of Professional Conduct 1.6*

Comment 19 to Rule 1.6

“When transmitting a communication that includes information relating to the representation of a client, the lawyer must take reasonable precautions to prevent the information from coming into the hands of unintended recipients.”

* Same duty is owed to a **prospective** client (per ABA Model Rule 1.18)



ABA Model Rule of Professional Conduct 1.6

Interpretation of Commentary 19 to Rule 1.6

“Some legal scholars have raised concerns about whether entering confidential information into an AI tool might compromise later attempts to invoke legal privileges.”



Source: “2023 Year-End Report on the Federal Judiciary,” Chief Justice John Roberts (December 31, 2023)

ABA Model Rule of Professional Conduct 1.6

Worldwide Concern Regarding Confidentiality when Using A.I.

“Be extremely vigilant not to share with a generative LLM system any legally privileged or confidential information (including trade secrets), or any personal data, as the input information provided is likely to be used to generate future outputs and could therefore be publicly shared with other users.”



The Bar Council

Source: "Considerations when Using ChatGPT and Generative Artificial Intelligence Software Based on Large Language Models," The General Council of the Bar (January 31, 2024)

ABA Model Rule of Professional Conduct 1.6

Worldwide Concern Regarding Confidentiality when Using A.I.

“Any such sharing of confidential information is likely to be a breach of Core Duty 6 and rule rC15.5 of the Code of Conduct, which could also result in disciplinary proceedings and/or legal liability.”



Source: “Considerations when Using ChatGPT and Generative Artificial Intelligence Software Based on Large Language Models,” The General Council of the Bar (January 31, 2024)

ABA Model Rule of Professional Conduct 2.1

Advisor

“In representing a client, a lawyer shall exercise independent professional judgment and render candid advice. In rendering advice, a lawyer may refer not only to law but to other considerations such as moral, economic, social and political factors, that may be relevant to the client's situation.”



ABA Model Rule of Professional Conduct 5.1

Responsibilities of a Partner or Supervisory Lawyer

(a) A partner in a law firm, and a lawyer who individually or together with other lawyers possesses comparable managerial authority in a law firm, shall make reasonable efforts to ensure that the firm has in effect measures giving reasonable assurance that all lawyers in the firm conform to the Rules of Professional Conduct.

* * *

(c) A lawyer shall be responsible for another lawyer's violation of the Rules of Professional Conduct if:

(1) the lawyer orders or, with the knowledge of the specific conduct, ratifies the conduct involved.”



ABA Model Rule of Professional Conduct 5.3

Responsibilities Regarding Non-Lawyer Assistance

“With respect to a nonlawyer employed or retained by or associated with a lawyer:

*** * ***

(b) A lawyer having direct supervisory authority over the nonlawyer shall make reasonable efforts to ensure that the person's conduct is compatible with the professional obligations of the lawyer; and

(c) A lawyer shall be responsible for conduct of such a person that would be a violation of the Rules of Professional Conduct if engaged in by a lawyer if:

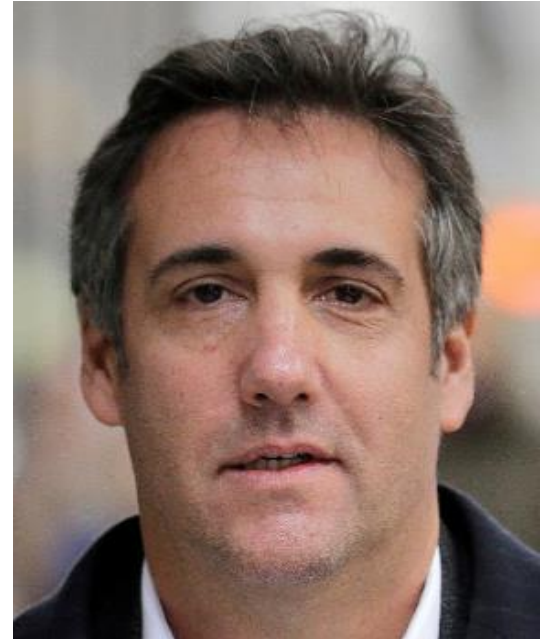
(1) the lawyer orders or, with the knowledge of the specific conduct, ratifies the conduct involved.”



ABA Model Rule of Professional Conduct 5.3

Responsibilities Regarding Non-Lawyer Assistance

“Donald Trump's former attorney, Michael Cohen, admitted providing fake AI-generated court citations to his own lawyer, who failed to check whether the cited cases were real before submitting them in a court brief. Cohen said the fake court cases came from Google Bard and that he thought Bard was like ‘a super-charged search engine’ rather than a generative AI tool.”



Source: “Michael Cohen gave his lawyer fake citations invented by Google Bard AI tool”, ars TECHNICA, Jon Brodtkin (January 2, 2024)

ABA Model Rule of Professional Conduct 5.3

Responsibilities Regarding Non-Lawyer Assistance

8. I must rely on my attorneys in this matter because I was disbarred nearly five years ago; litigation of this sort was not a meaningful part of my practice before then; and I do not

20. Specifically, the citations and descriptions came from Google Bard. As a non-lawyer, I have not kept up with emerging trends (and related risks) in legal technology and did not realize that Google Bard was a generative text service that, like Chat-GPT, could show citations

Artificial Intelligence

Applicable Ethics Rule

1.1 Competence

Artificial Intelligence

The Challenge for the Legal Profession

“AI is really just a tool,’ U.S. Magistrate Judge Allison Goddard of the Southern District of California said during the panel. ‘Bad lawyering has been around for a long time, and now they have a new tool for bad lawyering.’ Judge Goddard said existing rules can address the mistakes that lawyers might make with generative AI, such as the American Bar Association rules of professional conduct that require competency.”



Source: “Legal Generative AI Developing Despite Some ‘Bad Lawyering’,” Law360 Pulse, Steven Lerner, (December 7, 2023)

ABA Model Rule of Professional Conduct 1.1

Competence

“A lawyer shall provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation.”



ABA Model Rule of Professional Conduct 1.1

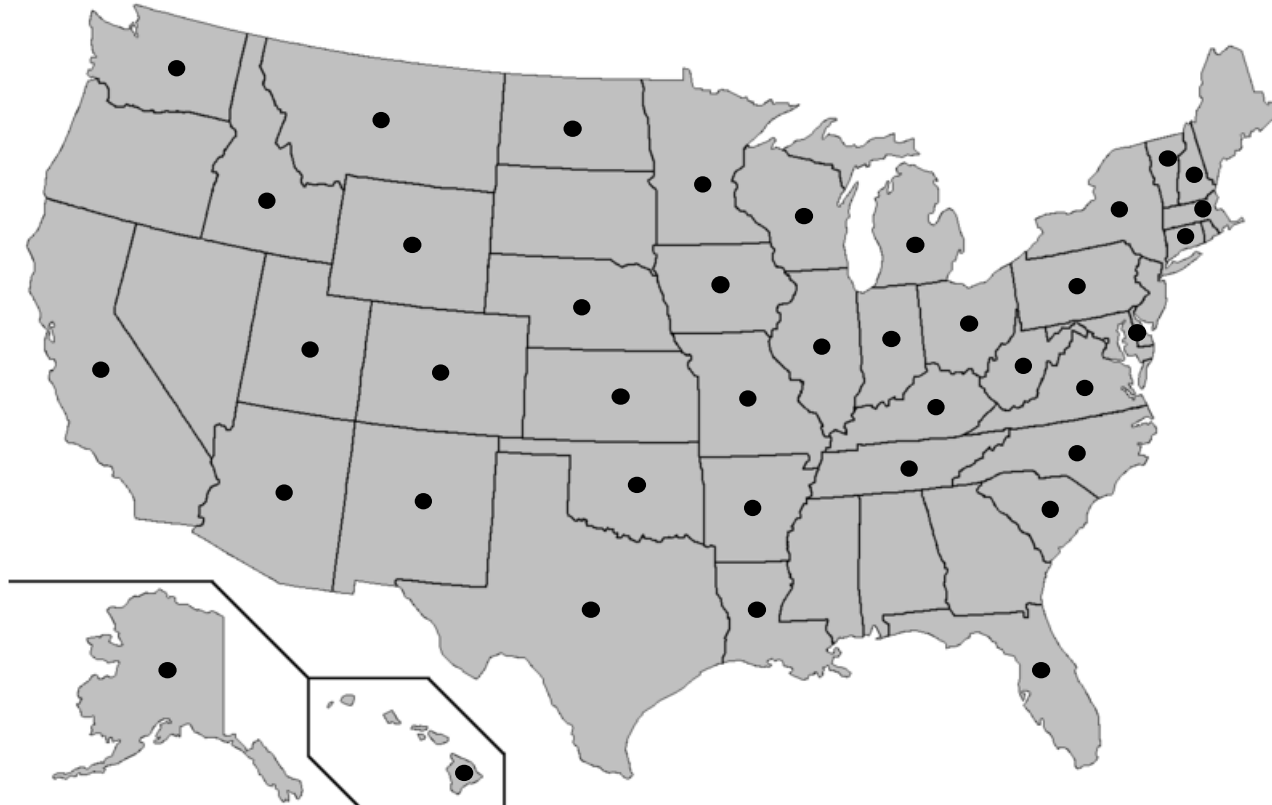
Comment 8 to Rule 1.1 (with emphasis added)

“To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes and the law and its practice, including **the benefits and risks associated with relevant technology.”**



States with a Duty of Tech Competence = 40*

* as of February 22, 2024 (according to [lawnext.com/tech-competence](https://www.lawnext.com/tech-competence))



ABA Model Rule of Professional Conduct 1.1

The “Warning” about Comment 8: Stay on Top of Technology

“Since the ABA adopted the now infamous Comment 8 to Model Rule 1.1, most writers and commentators have been sounding the warning: attorneys must understand the risks associated with the relevant use of technology to stay competent.”

Source: “The Ethics of Using Cloud-Based Services and Products,” Darla Jackson & Kenton Brice, Oklahoma Bar Journal (May 2019)

ABA Model Rule of Professional Conduct 1.1

Interpretation of Commentary 8 to Rule 1.1

“A lawyer today must have a baseline understanding of current technology and the inherent risks and benefits accompanying that technology. Know enough to ‘know what you don’t know’ and to actively recruit experts, consultants or teachers to build your knowledge.”



Source: “Attorney Competence in Technology Is in the Spotlight. Are You Competent?” Cybersecurity Law & Strategy, Thomas Suros (June 1, 2021)

ABA Model Rule of Professional Conduct 1.1

Example: Video-Conferencing Technology



ABA Model Rule of Professional Conduct 1.1

Potential Violation in Recent High-Profile Lawsuit

“[P]roducing an entire cellphone in discovery because you do not understand how to segregate Dropbox links, perform keyword searches or apply redactions is a clear Rule 1.1 violation.”



Source: “Ethical Lessons from the Alex Jones Discovery Debacle,” Law360, Hilary Gerzhoy, Julienne Pasichow & Grace Wynn (August 5, 2022)

ABA Model Rule of Professional Conduct 1.1

James v. Nat'l Fin. LLC, 2014 Del. Ch. LEXIS 254, *36 (Del. Ch. Ct. Dec. 5, 2014)

8 and Model Rules of Prof'l Conduct R. 1.1 cmt. 8. "[D]eliberate ignorance of technology is inexcusable [I]f a lawyer cannot master the technology suitable for that lawyer's practice, the lawyer should either hire tech-savvy lawyers tasked with responsibility to keep current, or hire an outside technology consultant who understands the practice of law and associated ethical constraints." Judith L. Maute, *Facing 21st Century Realities*, 32 *Miss. C. L. Rev.* 345, 369 (2013). Legal publications in Delaware and Pennsylvania have discussed the amendments to

ABA Model Rule of Professional Conduct 1.1

Areas in Which Courts Have Imposed a Duty of Tech Competence

- **Electronic Filing**
- **Case Management Systems**
- **Online Legal Research**
- **Discovery**
- **Social Media**
- **Metadata**



Source: "The Fate of Comment 8: Analyzing a Lawyer's Ethical Obligation of Technical Competence," 90 U.Cin.L.Rev. 1321, Lisa Z. Rosenof (2022)

ABA Model Rule of Professional Conduct 1.1

Comment 8 Is Designed to Accommodate New Tech (like A.I.)

“In the context of using AI tools, Comment 8 to [Rule 1.1] explicitly states ‘a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology.’ This language is deliberately vague to accommodate evolving technologies, such as [generative A.I.]”

Bloomberg Law

Source: “ChatGPT Doesn’t Have Ethical Obligations, But Attorneys Do,” U.S. Law Week, Natalie Pierce & Stephanie Goutos (July 11, 2023)

Artificial Intelligence

Application of Comment 8 to Artificial Intelligence

“This means lawyers need to understand the emerging technology of generative AI enough to be familiar with both how it can benefit their clients and practice as well as how it can pose risks to their clients and practice.”



Source: “The Ethics and Regulation of AI,” ABA Law Practice Magazine, Jayne R. Reardon & Tom Martin (January 1, 2024)

ABA Model Rule of Professional Conduct 1.1

“First, and perhaps most basic: do not use technology without understanding its limitations” (Citing 1.1)

“The problem was not that he used ChatGPT: the court found that there was nothing “inherently improper” about using the technology. Rather, the real problem was the lawyer initially used ChatGPT without understanding its limitations.”

Source: “Misadventures in ChatGPT: Lessons Learned,” Pullman & Comley (“Law Firm Risk Management Alert”), Marcy T. Stovall (July 6, 2023)

Artificial Intelligence

The Patent Practitioner's Ethical Responsibilities

“Furthermore, under ABA Model Rule 1.1, a lawyer 'shall provide competent representation to a client.' In other words, a lawyer must ensure that any LLM output utilized in a patent application is correct and true.”



Source: “How to Use (and Not Use) Large Language Models in Patent Application Drafting,” McDonnell Boehnen Hulbert & Berghoff LLP, Michael S. Borella & Aaron V. Gin (August 1, 2023)

Artificial Intelligence

Consequences Beyond Ethics Rules

Sanctions

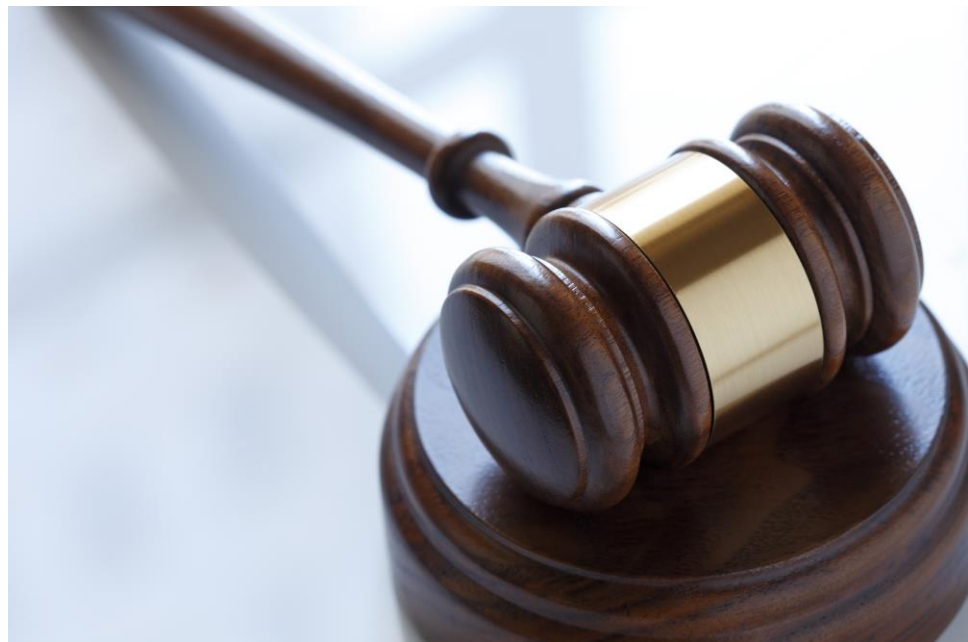
Federal Rule of Civil Procedure 11

Signing Pleadings, Motions or Other Papers; Representations to the Court; Sanctions

“(b) REPRESENTATIONS TO THE COURT. By presenting to the court a pleading, written motion, or other paper – whether by signing, filing, submitting, or later advocating it – **an attorney** or unrepresented party **certifies that to the best of the person's knowledge, information, and belief, formed after an inquiry reasonable under the circumstances:**

* * *

(2) **the claims, defenses, and other legal contentions are warranted by existing law** or by a nonfrivolous argument for extending, modifying, or reversing existing law or for establishing new law[.]”



Artificial Intelligence

Park v. Kim, 2024 U.S. App. LEXIS 1996, *11-12 (2d Cir. Jan. 30, 2024)

“The brief presents a false statement of law to this Court, and it appears that Attorney Lee made no inquiry, much less the reasonable inquiry required by Rule 11 and long-standing precedent, into the validity of the arguments she presented. We therefore REFER Attorney Lee to the Court's Grievance Panel . . . for further investigation . . . If a lawyer chooses to employ technology in representing a client, the lawyer continues to be bound by the requirements of Federal Rule of Civil Procedure 11[.]”

Artificial Intelligence

Consequences Beyond Ethics Rules

And More?

Artificial Intelligence

Kruse v. Karlen, 2024 Mo. App. LEXIS 62, *1 (Mo. Ct. of App. Feb. 13, 2024)

Introduction

Jonathan R. Karlen (“Appellant”) appeals from the trial court’s grant of final summary

We have itemized each of the twenty-two inaccurate case citations below in order of their appearance:

Given the frivolousness of the appeal, we also award damages to Respondent pursuant to Rule 84.19.¹

Artificial Intelligence

Steps Being Taken by Courts

“A growing number of judges have issued orders since the spring governing how attorneys with cases before them can use AI tools, which are prone to making things up.

The orders fall into several categories, said Shannon Capone Kirk, global head of advance e-discovery and AI strategy at law firm Ropes & Gray. Some seek to educate, while others prohibit the use of AI altogether. Most require disclosure of the use of AI or verification of the information, she said.”



REUTERS

Source: “Wary Courts Confront AI Pitfalls as 2024 Promises More Disruption,” Reuters, Sara Merkin (December 28, 2023)

Artificial Intelligence

Steps Being Taken by Courts

Fifth Circuit Rule 32.3

32.3. Certificate of Compliance. See Form 6 in the Appendix of Forms to the FED. R. APP. P. **Additionally, counsel and unrepresented filers must further certify that no generative artificial intelligence program was used in drafting the document presented for filing, or to the extent such a program was used, all generated text, including all citations and legal analysis, has been reviewed for accuracy and approved by a human. A material misrepresentation in the certificate of compliance may result in striking the document and sanctions against the person signing the document.**

Artificial Intelligence

Steps Being Taken by Courts – But There’s a Challenge

“Some judges, in the months following the Avainca case, publicity began entering standing orders requiring counsel to disclose whether their pleadings or briefs were prepared with the use of generative AI. Compliance with such directives would be virtually impossible, as the ostensibly reportable applications are constantly changing as generative AI is being incorporated into everyday programs, including Microsoft 365 and Google Apps.”



Source: “The Ethics and Regulation of AI,” ABA Law Practice Magazine, Jayne R. Reardon & Tom Martin, (January 1, 2024)

- * Management of Vast Amounts of Data**
 - * Availability (24/7)**
- * Reduction of Human Error**
 - * Unbiased Analysis**

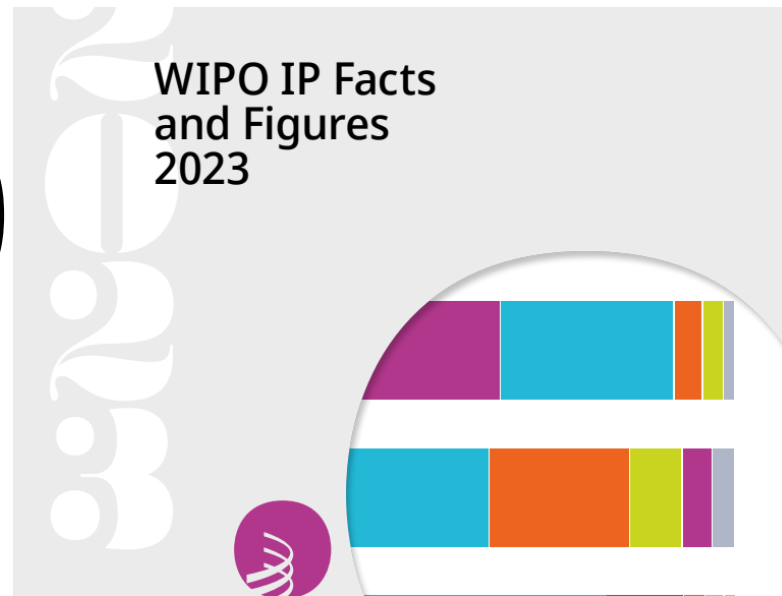
- * **Management of Vast Amounts of Data**
 - * **Availability (24/7)**
 - * **Reduction of Human Error**
 - * **Unbiased Analysis**

Artificial Intelligence

Benefit: Vast Amounts of Data (Patents in Force Worldwide)

“In 2022, the number of patents in force worldwide grew by 4.1%, reaching approximately **17.3 million**. Notably, China led with the highest count of patents in force at 4.2 million, followed by the United States of America (US) with 3.3 million and Japan with 2 million.”

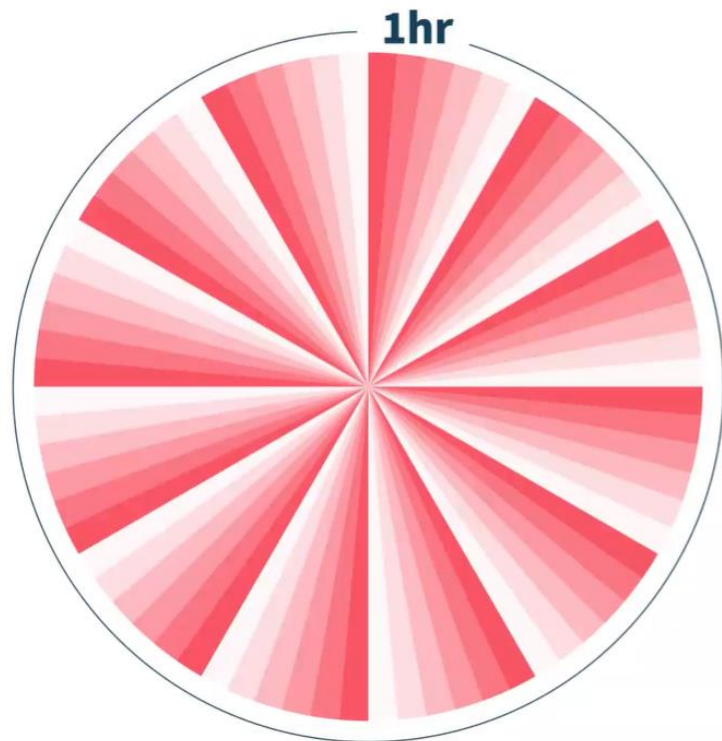
Source: “World Intellectual Property Organization IP Facts and Figures 2023” (2023)



- * **Management of Vast Amounts of Data**
 - * **Availability (24/7)**
 - * **Reduction of Human Error**
 - * **Unbiased Analysis**

Artificial Intelligence

Benefit: Management of Data



Consider: A human can read 5 patents an hour

- * **Management of Vast Amounts of Data**
 - * **Availability (24/7)**
- * **Reduction of Human Error**
 - * **Unbiased Analysis**

Artificial Intelligence

Benefit: Availability



- * **Management of Vast Amounts of Data**
 - * **Availability (24/7)**
 - * **Reduction of Human Error**
 - * **Unbiased Analysis**

Artificial Intelligence

Benefit: Reduction of Human Error (or Even Imprecision) – Example

sidewalk	/5	slip	/5	house
path		fall		home
footpath		trip		residence
lane		tumble		abode
				apartment

- * **Management of Vast Amounts of Data**
 - * **Availability (24/7)**
 - * **Reduction of Human Error**
 - * **Unbiased Analysis**

Artificial Intelligence

Benefit: Unbiased Analysis

“Bias has long been a concern in analysis and argument evaluation. Human analysts, no matter how well-intentioned, are prone to biases that can influence their judgment. These biases can stem from personal beliefs, cultural backgrounds, or even unconscious prejudices. As a result, the analysis and evaluation of arguments can be skewed, leading to flawed conclusions.”



Source: “Unbiased Analysis: How AI is Reducing Bias and Improving Argument Evaluation,” TS2, Marcin Frackiewicz (October 12, 2023)

Artificial Intelligence

Benefit: Unbiased Analysis

“AI, on the other hand, operates on algorithms and data, devoid of personal biases. It can process information objectively, without being influenced by emotions or preconceived notions. By using AI in analysis and argument evaluation, we can minimize the impact of human biases and ensure a more impartial assessment.”



Source: “Unbiased Analysis: How AI is Reducing Bias and Improving Argument Evaluation,” TS2, Marcin Frackiewicz (October 12, 2023)

- * **Management of Vast Amounts of Data**
 - * **Availability (24/7)**
 - * **Reduction of Human Error**
 - * **Unbiased Analysis†**

Artificial Intelligence

Benefits and Risks

“Language models are prone to machine learning bias. Since the model was trained on internet text, it has potential to learn and exhibit many of the biases that humans exhibit online.”



Source: “GPT-3” (Definition), TechTarget, Ben Lutkevich (undated)

Artificial Intelligence

Benefits and Risks

- * Quality of Training Data**
- * “Open” Data Sources**
- * Lag In Time**

Artificial Intelligence

Benefits and Risks

- * Quality of Training Data**
- * “Open” Data Sources**
- * Lag In Time**

Artificial Intelligence

Risk: Quality of Training Data

The websites in Google's C4 dataset

 < Page 1 of 67 >

RANK	DOMAIN	CATEGORY	PERCENT OF ALL TOKENS
1	patents.google.com	Law & Government	0.46%
2	wikipedia.org	News & Media	0.19%
3	scribd.com	News & Media	0.07%
4	nytimes.com	News & Media	0.06%
5	journals.plos.org	Science & Health	0.06%
6	latimes.com	News & Media	0.05%
7	theguardian.com	News & Media	0.05%
8	forbes.com	News & Media	0.05%
9	huffpost.com	News & Media	0.04%
10	patents.com	Law & Government	0.04%



Source: "Inside the secret list of websites that make AI like ChatGPT sound smart," The Washington Post, Kevin Schaul, Szu Yu Chen & Nitasha Tiku (April 19, 2023)

Artificial Intelligence

Original Patent for the Manure Spreader

UNITED STATES PATENT OFFICE.

JOSEPH OPPENHEIM, OF MARIA STEIN, OHIO.

MANURE DISTRIBUTER AND SPREADER.

SPECIFICATION forming part of Letters Patent No. 648,519, dated May 1, 1900.

Application filed February 17, 1900. Serial No. 5,641. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH OPPENHEIM, a citizen of the United States, residing at Maria Stein, in the county of Mercer and State of Ohio, have invented certain new and useful improvements in Manure Distributers and Spreaders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

In the class of machines for distributing fertilizer of the character of manure or compost the ground is enriched to the extent only of the width of the wagon-body or other de-

tures of the invention are necessarily susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal section of a manure-distributer, showing the spreader in position. Fig. 2 is a top plan view thereof. Fig. 3 is a view similar to Fig. 2 of a modification.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The machine may be of any construction generally utilized for distributing compost, manure, or like fertilizer, and comprises a

Artificial Intelligence

Mis-Digitization of Patent for the Manure Spreader

UNITED Similis PATENT OFFICE.

JOSEPH'OPPENHEIM, OF MARIA STEIN, OHIO.

MANUR'E DisTRiBuTR ANe sPREADx:-RI

srncrrrrcnrion forming part ef Letters` PetentiN. 648,519, elated

May 1, 190e. Application filed February 17, 1900.' Serial No.
5,641, (No model.)

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Be it known that I, JOSEPH OPPENHEIM, a citizen of the United States, residing at Maria Stein, in the county of Mercer and State of Ohio, have -invented certain new and useful Improvements in Manure Distribnters and Spreaders; and I do hereby declare the follow- ing to be a full, clear, and exact

Artificial Intelligence

Mis-Digitization of Patent for the Manure Spreader

"Manure Distributers and Spreaders"

 ("Manure Distributers and Spreaders");

No results found.

Artificial Intelligence

Risk: Quality of Training Data (What If “Reputable” Sources Are Not Available?)

The websites in Google’s C4 dataset

 Page 1 of 67

RANK	DOMAIN	CATEGORY	PERCENT OF ALL TOKENS
1	patents.google.com	Law & Government	0.46%
2	wikipedia.org	News & Media	0.19%
3	scribd.com	News & Media	0.07%
4	nytimes.com	News & Media	0.06%
5	journals.plos.org	Science & Health	0.06%
6	latimes.com	News & Media	0.05%
7	theguardian.com	News & Media	0.05%
8	forbes.com	News & Media	0.05%
9	huffpost.com	News & Media	0.04%
10	patents.com	Law & Government	0.04%



Source: “Inside the secret list of websites that make AI like ChatGPT sound smart,” The Washington Post, Kevin Schaul, Szu Yu Chen & Nitasha Tiku (April 19, 2023)

Artificial Intelligence

Risk: Quality of Training Data (What If “Reputable” Sources Are Not Available?)

2. Defendants’ unlawful use of The Times’s work to create artificial intelligence products that compete with it threatens The Times’s ability to provide that service. Defendants’ generative artificial intelligence (“GenAI”) tools rely on large-language models (“LLMs”) that were built by copying and using *millions* of The Times’s copyrighted news articles, in-depth investigations, opinion pieces, reviews, how-to guides, and more. While Defendants engaged in widescale copying from many sources, they gave Times content particular emphasis when building their LLMs—revealing a preference that recognizes the value of those works. Through Microsoft’s Bing Chat (recently rebranded as “Copilot”) and OpenAI’s ChatGPT, Defendants seek to free-ride

Artificial Intelligence

Risk: Quality of Training Data

“Perplexity also allows users to search within a specific set of sources, such as academic papers, YouTube videos or Reddit posts.”

**The
New York
Times**

Source: “Can This A.I.-Powered Engine Replace Google?” The New York Times, Kevin Roose (February 11, 2024)

Artificial Intelligence

Benefits and Risks

~~* Quality of Training Data~~

* “Open” Data Sources

* Lag In Time

Artificial Intelligence

Benefits and Risks

- * **Quality of Training Data**

- * **“Open” Data Sources**

- * **Lag In Time**

Artificial Intelligence

Risk: “Open” Data Sources

“Large language models are trained on data sets that are built by scraping the internet for text, including all the toxic, silly, false, malicious things humans have written online. The finished AI models regurgitate these falsehoods as fact, and their output is spread everywhere online. Tech companies scrape the internet again, scooping up AI-written text that they use to train bigger, more convincing models, which humans can use to generate even more nonsense before it is scraped again and again, ad nauseam.”

**MIT
Technology
Review**

Source: “How AI-Generated Text Is Poisoning the Internet,” MIT Technology Review, Melissa Heikkilä (December 22, 2022)

Artificial Intelligence

Risk: “Open” Data Sources

“Bard is a large language model by Google that is built from vast data sets; Google also designed Bard to be able to access the internet.”



Source: “Google Bard Cheat Sheet: What Is Google Bard, and How Does It Work?”, TechRepublic, Andy Wolber (December 8, 2023)

Artificial Intelligence

Risk: “Open” Data Sources

“[LLMs such as ChatGPT and GPT-4] are given a large corpus of text gathered from different sources, such as Wikipedia, news websites, and GitHub[.]”



Source: “What is ChatGPT? A Basic Explainer,” PCMag, Ben Dickson (June 5, 2023)

Artificial Intelligence

Risk: “Open” Data Sources

The websites in Google’s C4 dataset

 Page 1 of 67

RANK	DOMAIN	CATEGORY	PERCENT OF ALL TOKENS
1	patents.google.com	Law & Government	0.46%
2	wikipedia.org	News & Media	0.19%
3	scribd.com	News & Media	0.07%
4	nytimes.com	News & Media	0.06%
5	journals.plos.org	Science & Health	0.06%
6	latimes.com	News & Media	0.05%
7	theguardian.com	News & Media	0.05%
8	forbes.com	News & Media	0.05%
9	huffpost.com	News & Media	0.04%
10	patents.com	Law & Government	0.04%



Source: “Inside the secret list of websites that make AI like ChatGPT sound smart,” The Washington Post, Kevin Schaul, Szu Yu Chen & Nitasha Tiku (April 19, 2023)

Artificial Intelligence

Who invented the manure spreader?

an excellent speaker”¹. As an educator, Oppenheim became the first teacher in Ohio to receive a Lifetime State Teachers Certificate¹. While watching children play a game called “tom ball,” Oppenheim noticed that when the ball was struck with the bat, which was actually a paddle-shaped board, the ball was deflected to one side or the other, depending on the angle of the paddle. Oppenheim saw this paddle-effect as the solution to the problem of manure spreading. He felt that a series of paddles could be attached to the rear of a manure unloader to cast manure in a wide pattern several times the width of the wagon. To test his theory, Joseph, with the help of his oldest son, B.C. Oppenheim, knocked the end out of a cigar box and built a small rotary paddle distributor into that open end¹.

Learn more

- 1  bing.com
- 2  en.wikipedia.org
- 3  en.wikipedia.org
- 4  en.wikipedia.org

specializing in piano and pipe organ, ... a remarkable scholar, conversant with four languages. well read in literature. and



Artificial Intelligence

Risk: “Open” Data Sources (What If the Data Is Inaccurate?)

Manure spreader

 13 languages 

Article [Talk](#)

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From Wikipedia, the free encyclopedia


This is an **old revision** of this page, as edited by [217.155.42.183 \(talk\)](#) at 01:11, 9 November 2010. The present address (URL) is a **permanent link** to this revision, which may differ significantly from the **current revision**.

(diff) [← Previous revision](#) | [Latest revision \(diff\)](#) | [Newer revision](#) [→ \(diff\)](#)

A **manure spreader** or **muck spreader** or **honey wagon** is an **agricultural machine** used to distribute **manure** over a field as a **fertilizer**. A typical (modern) manure spreader consists of a trailer towed behind a **tractor** with a rotating mechanism driven by the tractor's **power take off (PTO)**. Truck mounted manure spreaders are also common in North America.

Manure spreaders began as ground-driven units which could be pulled by a horse or team of horses. Many of these ground-driven spreaders are still produced today, mostly in the form of small units that can be pulled behind a larger **garden tractor** or an **all terrain vehicle (ATV)**. In recent years Hydraulic and PTO driven units have been developed to offer variable application rates. Several models are also designed with removable rotating mechanisms, attachable side extensions, and tailgates for hauling chopped forages, cereal grains, and other crops.



a manure spreader 

Joseph Oppenheim and Henry Synck of Ohio are credited with the first successful mechanical manure spreader in 1891. However, it is clear there were other competitors in this field, each of whom spread the manure by a slightly different technique. One of these is the Great Western Farm Equipment Line, produced in Chicago, IL. ^[1]

Artificial Intelligence

Risk: "Open" Data Sources (What If the Data Is Inaccurate?)

Henry Synck

From Wikipedia, the free encyclopedia

This is an **old revision** of this page, as edited by [Rfagel](#) ([talk](#) | [contribs](#)) at 14:55 (UTC) on 29 June 2008 (clarification of role of synck and oppenheim). The present address ([URL](#)) is a permanent link to this revision, which may differ significantly from the current revision.

(diff) ← [Previous revision](#) | [Latest revision](#) (diff) | [Newer revision](#) → (diff)

Henry Synck was a pioneering [American](#) industrialist who participated in the development of mechanized farming. He and his father-in-law, [Joseph Oppenheim](#), developed the first practical manure spreader. Their invention was so successful that it spawned a major manufacturing company, the New Idea Spreader Works, later renamed the New Idea Farm Machinery Company.^[1]

Henry Synck was born in [Saint Sebastian, Ohio](#). He married Wilhelmine Oppenheim, the daughter of Joseph Oppenheim, a teacher in [Maria Stein, Ohio](#). In 1899 Oppenheim with the help of Synck invented the first mechanical manure spreader. Oppenheim conceived the idea of a practical manure spreader during a game of [paddle ball](#).^[2] He noted that "when a player held the paddle-shaped bat at an angle, a foul ball resulted, with the ball careening off at the angle dictated by the paddle. Why not, pondered Oppenheim, make manure do the same thing—fly out at an angle from a series of paddles?" He subsequently developed a model from a cigar box and demonstrated the feasibility of distributing manure in a "wide spread pattern". An example of the Model 12 New Idea Manure Spreader demonstrates the general design. Manure was loaded into the spreader. A mechanism moved the manure to the rear where it was distributed by paddles. An example of the paddle mechanism is shown from a model 17 spreader.



Artificial Intelligence

Risk: “Open” Data Sources (What If the Data Is Inaccurate?)

Joseph Oppenheim

From Wikipedia, the free encyclopedia

Joseph Oppenheim (March 1, 1859 – November 24, 1901) was an educator who invented the modern widespread manure spreader that made farming less labor-intensive and far more efficient in the early 20th century,^[1] and only he is honored for that invention in the Ohio Agricultural Hall of Fame in Columbus, Ohio.^[2]

Contents [\[hide\]](#)

- [1 Early Life and Teaching Career](#)
- [2 Educator Turns Inventor](#)
- [3 Oppenheim's New Idea manure spreader](#)
- [4 Rapid Growth of The New Idea Company](#)
- [5 Sources](#)
- [6 List of References](#)



A manure spreader

Early Life and Teaching Career [\[edit\]](#)

Born on March 1, 1859 in the small village of [Kirchhundem, Germany](#). Oppenheim obtained a liberal education at universities in [Bonn, Germany](#), and [Innsbruck, Austria](#),^[3] and upon graduation from college at the age of 20 he immigrated to the United States. He received a teaching degree in 1881 from St. Francis College in Wisconsin and after briefly teaching in Putnam County, Ohio, he returned to St. Francis College for further study. On August 9, 1883 he married Anna

Artificial Intelligence

Risk: "Open" Data Sources (What If the Data Is Inaccurate?)

Henry Synck

From Wikipedia, the free encyclopedia

Henry Synck, Jr. was an [American](#) industrialist who participated in the development of mechanized farming.

In the farming communities of Ohio, fertilization of fields was possible only by the distribution of animal excrement, usually mixed with bedding straw to create a semi-solid mixture of manure. The task of shoveling and distributing the manure was backbreaking and there were many attempts made to mechanize this process. One such example was a patent by a Daniel Merrell in 1886 for a mechanized "manure spreader".^[1] There were a number of other patent filings prior to the onset of the 20th century. In 1899 John M Kramer, Fred Heckman and Henry Synck, Jr., all of whom lived in the small farming community of [Maria Stein, OH](#) were awarded a patent^[2] for a device to spread manure which they named a "manure distributor". **Synck subsequently worked with his future father-in-law, Joseph Oppenheim, to develop the first practical manure spreader.** Oppenheim's 1900 invention^[3] was so successful that it spawned a major manufacturing company, the New Idea Spreader Works, later renamed the New Idea Farm Machinery Company in 1899. New Idea celebrated its 100th anniversary in 1999 as a division of AGCO.^[4] Synck's role in the evolution of manure spreader and other farm machinery technology is well documented by a steady stream of patents that not only describe improvements to the manure spreader, but also other farm machinery from 1899 to 1939.^[5]

Henry Synck, Jr. was born in [Saint Sebastian, Ohio](#). He married Wilhelmina Oppenheim, the daughter of Joseph Oppenheim, a teacher in [Maria Stein, Ohio](#). **In 1899 Synck's father-in-law, Joseph Oppenheim invented the most important component of the first practical mechanical manure spreader.** Oppenheim conceived the idea of a practical



Photograph of Henry Synck and Wilhelmine Oppenheim at the time of their marriage. 5

Artificial Intelligence

Risk: “Open” Data Sources (What If the Data Is Inaccurate?)

Manure spreader

🗨️ 13 languages ▾

A **manure spreader** or **muck spreader** or **honey wagon** is an **agricultural machine** used to distribute **manure** over a field as a **fertilizer**. A typical (modern) manure spreader consists of a trailer towed behind a **tractor** with a rotating mechanism driven by the tractor's **power take off (PTO)**. Truck mounted manure spreaders are also common in North America.^[*citation needed*]

Operation [edit]



This section **does not cite any sources**. Please help **improve this section** by **adding citations to reliable sources**. Unsourced material may be challenged and **removed**. (*April 2016*) (*Learn how and when to remove this template message*)



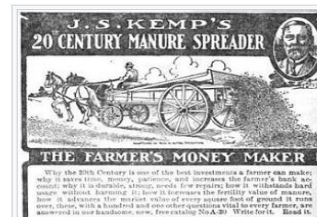
A modern manure spreader

Manure spreaders began as ground-driven units which could be pulled by a horse or team of horses. Many of these ground-driven spreaders are still produced today, mostly in the form of small units that can be pulled behind a larger **garden tractor** or an **all terrain vehicle (ATV)**. In recent years hydraulic and PTO driven units have been developed to offer variable application rates. Several models are also designed with removable rotating mechanisms (beaters), attachable side extensions, and tailgates for hauling chopped forages, cereal grains, and other crops. A typical (modern) manure spreader consists of a trailer towed behind a tractor with a rotating mechanism driven by the tractor's power take off (PTO).

History [edit]

The first successful automated manure spreader was designed by Joseph Kemp in 1875. Manure spreaders began as ground-driven units which could be pulled by a horse or team of horses. At the time of his invention, he was living near **Magog, Quebec** in **Canada**, but thereafter, he moved to **Newark Valley, New York** and formed the J.S. Kemp Manufacturing Co. to manufacture and market his current and subsequent designs. In 1903, he expanded the company to **Waterloo, Iowa** before selling the design to **International Harvester**, in 1906.^{[1][2][3]}

Joseph Oppenheim of **Maria Stein, Ohio** was the inventor of the first modern 'wide spreading' manure spreader^[4] and is honored as such in the Ohio Agricultural Hall of Fame.^[5] Originally manure was thrown from a wagon.^[6] Later, "manure unloaders" used a drag chain at the bottom of the wagon to pull the load of manure to the rear



Artificial Intelligence

Risk: “Open” Data Sources (What If the Data Is Inaccurate?)

Talk:Manure spreader

From Wikipedia, the free encyclopedia



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[Agriculture portal](#)

Start

This article has been rated as **Start-Class** on the project's [quality scale](#).

Low

This article has been rated as **Low-importance** on the project's [importance scale](#).

[Untitled] [\[edit\]](#)

I removed the name Henry Synck as inventor from the text. And this is why. This statement is not documented. There is a lightly documented article on Henry Synck already in Wikipedia stating that Synck “helped his father-in-law, Joseph Oppenheim, develop the spreader,” that Oppenheim “with the help of Synck invented the spreader” and that Synck “worked with him (Oppenheim) to perfect the invention” None of those statements in the Henry Synck article in Wikipedia is supported by authority.

Clearly, the US patent office shows that Oppenheim was awarded the patent for his invention in February 1900 and two sources (Winter in 1917 and Birt in 1974) say Oppenheim hired Synck in mid-October 1899. So given the time to file and process the patent it is unlikely Synck would have helped “invent” the spreader. (The second patent on the spreader issued in 1902, after Oppenheim died, was issued to his wife as executor, not to Synck) Sources I have

Artificial Intelligence

Risk: “Open” Data Sources (What If the Data Is Inaccurate?)

Talk:Manure spreader

From Wikipedia, the free encyclopedia



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[Agriculture portal](#)

Start

This article has been rated as **Start-Class** on the project's [quality scale](#).

Low

This article has been rated as **Low-importance** on the project's [importance scale](#).

[Untitled] [\[edit\]](#)

In fairness, I have stated that in the 1920's Synck was awarded several patents on the New Idea manure spreader, but this is not the same as having helped Oppenheim who died 20 years earlier "invent the spreader," or helped him "develop the spreader" or "worked with him to perfect the spreader." There are entries on the internet that credit Synck along with Oppenheim as co-inventors, but I believe that the internet articles all copy the undocumented Wikipedia entry on Synck. [Jjdilen](#) (talk) 17:37, 23 February 2011 (UTC)

Wikipedia:General disclaimer

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Artificial Intelligence

Benefits and Risks

- * **Quality of Training Data**
- * **“Open” Data Sources**
- * **Lag In Time**

Artificial Intelligence

Risk: Lag in Time

“ChatGPT’s knowledge is limited to the data it was trained on. At the time of this writing, the model has been trained on a corpus of text that was gathered in mid-2021. Therefore, it can’t answer questions about recent events.”



Source: “What is ChatGPT? A Basic Explainer,” PCMag, Ben Dickson (June 5, 2023)

Artificial Intelligence

Risk: Lag in Time

“[Large Language Models] are frequently 'out of date', because they are trained on data that is 1-2 years old and may not be capable of taking into account recent developments in law, science, and technology.”



Source: “How to Use (and Not Use) Large Language Models in Patent Application Drafting,” McDonnell Boehnen Hulbert & Berghoff LLP, Michael S. Borella & Aaron V. Gin (August 1, 2023)

Artificial Intelligence

~~Risk: Amount of Data (Patents in Force Worldwide)~~

~17,300,000

Source: "World Intellectual Property Organization IP Facts and Figures 2023" (2023)

Artificial Intelligence

Risk: Lag in Time (Microsoft Bing Chat)

how many patents are in force worldwide

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About 523,000 results

As of 2021, there are around **16.5 million patents in force worldwide**^{1 2}. The countries with the highest number of patents in force are China (3.6 million), the United States of America (US) (3.3 million), and Japan (2 million)¹. In 2020, there were around 15.9 million patents in force worldwide, with the highest number of patents in force recorded in the U.S. (3.3 million), followed by China (3.1 million), Japan (2 million), the Republic of Korea (1.1 million), and Germany (0.8 million)³.

Learn more:

- 1** WIPO IP Facts and Figures 2022
wipo.int
- 2** Worldwide IP Filings Reached New All-Time ...
wipo.int
- 3** World Intellectual Property Indicators Rep...
wipo.int

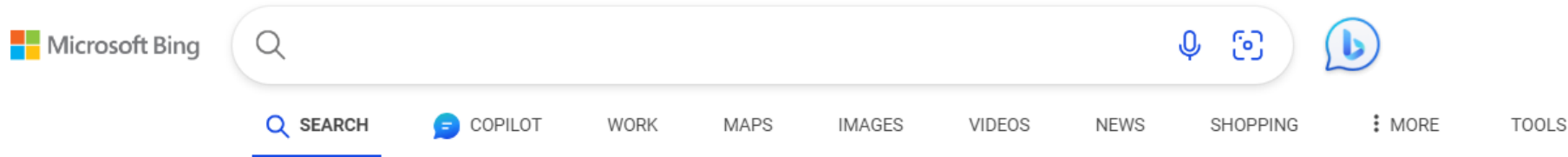
Artificial Intelligence

Risk: Lag in Time (Microsoft Bing Copilot)

The screenshot shows the Microsoft Bing Copilot chat interface. At the top, there are search and Copilot icons. A blue button on the right contains the query: "how many patents are in force worldwide". Below this, two green checkmarks indicate the search progress: "Searching for: how many patents are in force worldwide" and "Generating answers for you...". A privacy notice states: "Your personal and company data are protected in this chat". The main answer text is: "As of 2020, there were around **15.9 million patents in force worldwide**¹. The countries with the highest number of patents in force are **China (3.1 million), the United States of America (3.3 million), and Japan (2 million)**¹." Below the text is a disclaimer: "Please note that the number of patents in force is constantly changing, and the information I provided may not be up-to-date. If you need more information, please let me know how I can help." At the bottom, there are four source links: "1 wipo.int", "2 worldpopulationreview.com", "3 wipo.int", and "4 wipo.int". The first link is highlighted with a red box. At the very bottom, there are icons for thumbs up, thumbs down, copy, and download, along with the text "1 of 30 responses".

Artificial Intelligence

Brief Interruption: Huh?




Bing Chat and Copilot are both assistants, but they differ in their functions. Bing Chat is an assistant for your web search and creative needs, while Copilot is an assistant for your PC settings and functions ¹. Bing Chat Enterprise was rebranded to Copilot to create a unified Copilot experience for both consumer and commercial users ² ³. Microsoft 365 Copilot is an assistant for your office productivity and collaboration ¹.


Artificial Intelligence

Risk: Lag in Time (Google Bard)

D

how many patents are in force worldwide 



View other drafts 



As of the most recent data available in 2021, there were an estimated 16.5 million patents in force worldwide. This number has been steadily increasing over the past few years, with a growth rate of 4.2% in 2021 compared to 2020.

Here are some additional details about patents in force worldwide:

- **Top countries:** The countries with the highest number of patents in force are China (3.6 million), the United States (3.3 million), and Japan (2 million).
- **Regional trends:** Asia is the fastest-growing region for patents in force, with China leading the way.
- **Growth by technology:** Patents in force are growing in all fields of technology, but some of the fastest-growing areas include medical technology, artificial intelligence, and renewable energy.

Artificial Intelligence

Risk: Lag in Time (Google Gemini)

D how many patents are in force worldwide

Best Estimates:


The World Intellectual Property Organization (WIPO) is a reliable source for global intellectual property statistics. Here's what they say in their most recent "IP Facts and Figures" report:

- **Around 16.5 million patents were in force worldwide in 2021.**
(https://www.wipo.int/edocs/pubdocs/en/wipo_pub_943_2022_en_wipo_ip_facts_and_figures_2022.pdf)
- **Top Countries:** China (3.6 million), the United States of America (US) (3.3 million), and Japan (2 million) held the largest number of in-force patents.

Artificial Intelligence

Risk: Lag in Time (Open AI ChatGPT)

ChatGPT 3.5


 **You**
How many patents are in force worldwide


 **ChatGPT**

I don't have real-time data, but as of my last knowledge update in January 2022, there were over 11 million active patents worldwide. Keep in mind that this number may have changed since then. To get the most accurate and up-to-date information, you should check with official patent databases or organizations that track global patent statistics.



ChatGPT 3.5

 **You**
How many patents are in force worldwide

 **ChatGPT**
I don't have real-time data access, and my last knowledge update was in January 2022. As of that time, I don't have the specific number of patents in force worldwide. The number of patents granted and in force is constantly changing as new patents are granted, and old ones expire. You can check the latest statistics from organizations like the World Intellectual Property Organization (WIPO) or national patent offices for the most up-to-date information on the number of patents in force globally.



Artificial Intelligence

Risk: Lag in Time

“ChatGPT is now able to access the internet and provide real-time information to users, courtesy of Bing search. Previously, it was limited to supplying information that was good only up to September 2021.”

AI ⚙️ BUSINESS

Source: “ChatGPT Can Now Give You Real-Time Information,” AI*Business, Ben Wodecki (September 28, 2023)

Artificial Intelligence

Benefits and Risks

*** Quality of Training Data**

*** “Open” Data Sources**

~~*** Lag In Time**~~

Artificial Intelligence

Benefits and Risks

- * Quality of Training Data**
- * “Open” Data Sources**
- * Lag In Time**

Artificial Intelligence

Benefits and Risks

*** Quality of Training Data**

*** “Open” Data Sources**

*** Lag In Time**

*** Differing Results**

*** Errors & Hallucinations**

*** Confusion**

Artificial Intelligence

Benefits and Risks

- * **Quality of Training Data**
 - * **“Open” Data Sources**
 - * **Lag In Time**
 - * **Differing Results**
- * **Errors & Hallucinations**
 - * **Confusion**

Artificial Intelligence

Who invented the manure spreader?



Joseph Oppenheim, an educator, invented the modern widespread manure spreader that made farming less labor-intensive and far more efficient in the early 20th century ¹. He is the only person honored for that invention in the Ohio Agricultural Hall of Fame in Columbus, Ohio ². Oppenheim was born on March 1, 1859, in the small village of Kirchhundem, Kingdom of Prussia. He obtained a liberal education at universities in Bonn, Germany, and Innsbruck, Austria, and upon graduation from college at the age of 20 he immigrated to the United States ¹. He received a teaching degree in 1881 from St. Francis College in Wisconsin and after briefly teaching in Putnam County, Ohio, he returned to St. Francis College for further study. On August 9, 1883, he married Anna Mary Ellerbrock of Glandorf, Ohio ¹. Oppenheim was "an accomplished musician, specializing in piano and pipe organ, ... a remarkable scholar, conversant with four languages. well read in literature. and



Artificial Intelligence

Who invented the manure spreader?



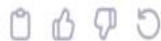
You

Who invented the manure spreader



ChatGPT

The manure spreader was invented by Joseph Kemp in 1875. Kemp, a farmer from upstate New York, developed the first successful mechanical manure spreader to efficiently distribute manure as fertilizer on fields. The invention revolutionized the process of spreading manure, making it more practical and less labor-intensive than manual methods. Over time, various improvements and modifications have been made to manure spreaders, but Joseph Kemp is credited with the initial invention.



Artificial Intelligence

Who invented the manure spreader?



Artificial Intelligence

Brief Interruption: ChatGPT Prior Result



Who invented the manure spreader



The manure spreader was invented by Joseph Oppenheim in the early 19th century. He received a patent for his design in 1875. The manure spreader is an agricultural machine used for evenly distributing manure or other fertilizers onto fields to improve soil fertility and crop growth. It revolutionized the process of fertilizing farmland and is still in use today, although modern versions have been developed and improved since Oppenheim's invention.




Artificial Intelligence

Who invented the manure spreader?

D

Who invented the manure spreader 

View other drafts  

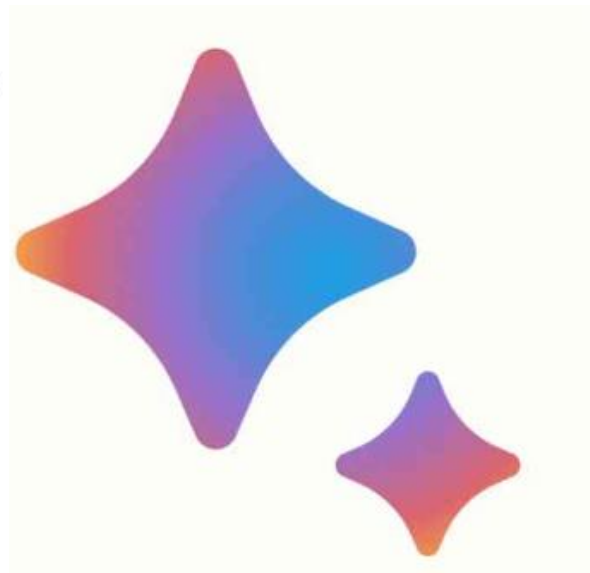
 Determining the single inventor of the manure spreader is a bit complicated, as the technology evolved over time with contributions from different individuals. Here's a breakdown:

Early versions:

- **Ancient times:** While not a machine, spreading manure as fertilizer has been practiced for millennia, dating back to at least 8,000 years ago in Europe. Farmers would manually scatter it across fields.
- **19th century:** The first automated manure spreader is attributed to **Joseph Kemp in 1875**. His horse-drawn machine utilized ground-driven mechanisms to distribute the material.

Modern "wide spreading" spreader:

- **Joseph Oppenheim** of Ohio is credited with inventing the "wide spreading" spreader in the early 20th century. This design incorporated paddles and beaters for a more efficient and even distribution of manure. He's recognized for this innovation in the Ohio Agricultural Hall of Fame.



Artificial Intelligence

Who invented the manure spreader?

D Who invented the manure spreader

Show drafts ▾ 🔊

✦ The invention of the manure spreader is primarily credited to Joseph Oppenheim of Maria Stein, Ohio. Here's why:

- **"Wide Spreading" Design:** Oppenheim is noted for developing the first modern 'wide spreading' manure spreader. This was a significant improvement over earlier manure spreaders which largely just pulled manure to the back of a wagon and dropped it in piles.
- **Ohio Agricultural Hall of Fame:** Joseph Oppenheim is honored in the Ohio Agricultural Hall of Fame specifically for his manure spreader invention.

Important Note: A Canadian named Joseph Kemp developed and patented an earlier successful automated manure spreader design in 1875. However, this design differed from Oppenheim's later wide-spreading model.



Artificial Intelligence

Who invented the manure spreader?

Who invented the manure spreader

Sources

Manure spreader -
Wikipedia

wikipedia . 1

Joseph Oppenheim -
Wikipedia

wikipedia . 2

How Manure Spreading
Has Changed Over...

artsway . 3

FC AG

View 2 more

Answer

The modern widespread manure spreader was invented by Joseph Oppenheim, an educator who designed the first successful automated manure spreader in 1875. He was living near Magog, Quebec in Canada at the time of his invention. The first successful automated manure spreader was designed by Joseph Kemp in 1875. However, Joseph Oppenheim of Maria Stein, Ohio, is honored as the inventor of the first modern 'wide spreading' manure spreader and is recognized for this invention in the Ohio Agricultural Hall of Fame ¹ ².



Artificial Intelligence

Who invented the manure spreader?

History [\[edit\]](#)

The first successful automated manure spreader was designed by Joseph Kemp in 1875. Manure spreaders began as ground-driven units which could be pulled by a horse or team of horses. At the time of his invention, he was living near [Magog, Quebec](#) in [Canada](#), but thereafter, he moved to [Newark Valley, New York](#) and formed the J.S. Kemp Manufacturing Co. to manufacture and market his current and subsequent designs. In 1903, he expanded the company to [Waterloo, Iowa](#) before selling the design to [International Harvester](#), in 1906.^{[1][2][3]}

[Joseph Oppenheim](#) of [Maria Stein, Ohio](#) was the inventor of the first modern 'wide spreading' manure spreader^[4] and is honored as such in the Ohio Agricultural Hall of Fame.^[5] Originally manure was thrown from a wagon.^[6] Later, “manure unloaders” used a drag chain at the bottom of the wagon to pull the load of manure to the rear

Artificial Intelligence

Brief Interruption (Another): 3 Different ChatGPT

You
Who invented the manure spreader

ChatGPT
The manure spreader was invented by Joseph Kemp in 1875. Upstate New York farmer, created the machine to efficiently distribute manure over fields as a form of fertilizer. The manure spreader revolutionized agricultural practices by making it easier for farmers to manage and utilize animal waste for soil enrichment.

You
Who invented the manure spreader

ChatGPT
The manure spreader was invented by Joseph Oppenheim in 1897. Oppenheim, an American farmer, created the machine to efficiently distribute manure over fields as a form of fertilizer. The manure spreader revolutionized agricultural practices by making it easier for farmers to manage and utilize animal waste for soil enrichment.

You
Who invented the manure spreader

ChatGPT
The manure spreader was invented by Joseph Oppenheim in 1891. He patented his design, which revolutionized the process of spreading manure on fields for fertilization. The manure spreader mechanized and streamlined the distribution of manure, making it more efficient and less labor-intensive for farmers. This invention played a crucial role in agricultural practices, contributing to improved soil fertility and crop yields.

Artificial Intelligence

Benefits and Risks

- * **Quality of Training Data**
 - * **“Open” Data Sources**
 - * **Lag in Time**
 - * **Differing Results**
 - * **Errors & Hallucinations**
 - * **Confusion**

Artificial Intelligence

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 - * **Errors & Hallucinations**
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Artificial Intelligence

Risk: Errors & Hallucinations

“Gemini can get things wrong. Select the Double-check Response to take the generated text, search Google for it and then highlight supporting sources in light green and those not found in light orange. Never rely solely on content provided in Gemini responses without verification.”



Source: “Google Bard Cheat Sheet: What Is Google Bard, and How Does It Work?”, TechRepublic, Andy Wolber (December 8, 2023)

Artificial Intelligence

Risk: Errors & Hallucinations

“In my testing, I found that Perplexity’s answers were mostly accurate – or, to be more precise, they were as accurate as the sources they drew upon.”

**The
New York
Times**

Source: “Can This A.I.-Powered Engine Replace Google?” The New York Times, Kevin Roose (February 11, 2024)

Artificial Intelligence

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- * **Quality of Training Data**
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 - * **Confusion**

Artificial Intelligence

Risk: Errors & **Hallucinations**

“Hallucinations are outputs from LLMs and generative AI that look coherent but are wrong or absurd. They may come from errors or gaps in the training data (that ‘garbage in, garbage out’ saw).”

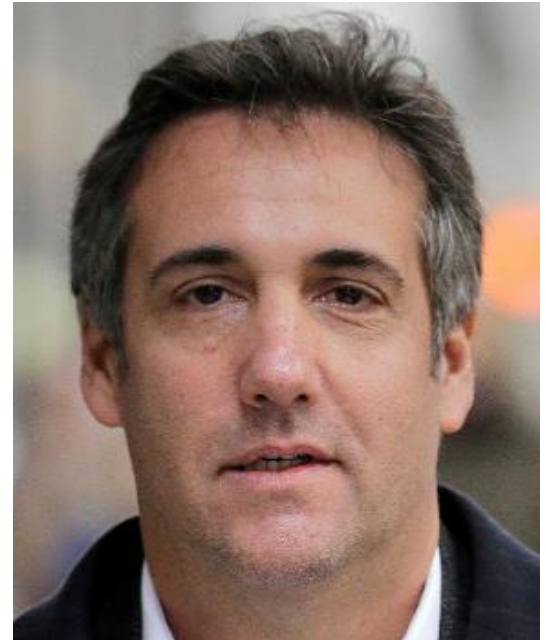
LLRX

Source: “The Trust about Hallucinations in Legal Research AI: How to Avoid Them and Trust Your Resources,” LLRX, Rebecca Fordon (September 25, 2023)

Artificial Intelligence

Risk: Errors & **Hallucinations**

“Donald Trump's former attorney, Michael Cohen, admitted providing fake AI-generated court citations to his own lawyer, who failed to check whether the cited cases were real before submitting them in a court brief. Cohen said the fake court cases came from Google Bard and that he thought Bard was like ‘a super-charged search engine’ rather than a generative AI tool.”



Source: “Michael Cohen gave his lawyer fake citations invented by Google Bard AI tool”, ars TECHNICA, Jon Brodtkin (January 2, 2024)

Artificial Intelligence

Risk: Errors & **Hallucinations**

“[H]allucination rates range from 69% to 88% in response to specific legal queries for state-of-the-art language models. Moreover, these models often lack self-awareness about their errors and tend to reinforce incorrect legal assumptions and beliefs. These findings raise significant concerns about the reliability of LLMs in legal contexts, underscoring the importance of careful, supervised integration of these AI technologies into legal practice.”



Source: “Hallucinating Law: Legal Mistakes with Large Language Models are Pervasive,” Stanford University Human-Centered Artificial Intelligence, Matthew Dahl, Varun Magesh, Mirac Suzgun & Daniel E. Ho (January 11, 2024)

Artificial Intelligence

Risk: Errors & **Hallucinations**

“The high-profile case involves bogus case law produced by ChatGPT and allegedly submitted to the court by a lawyer in a high-net-worth family dispute.

* * *

[The Attorney] apologized to the court, saying she was not aware [that ChatGPT] was unreliable and she did not check to see if the cases actually existed.”

Source: “B.C. ruling on AI ‘hallucinated’ fake legal cases could set precedent, experts say,” Global News, Simon Little (February 5, 2024)



Artificial Intelligence

Kruse v. Karlen, 2024 Mo. App. LEXIS 62, *1 (Mo. Ct. of App. Feb. 13, 2024)

Introduction

Jonathan R. Karlen (“Appellant”) appeals from the trial court’s grant of final summary

We have itemized each of the twenty-two inaccurate case citations below in order of their appearance:

Appellant’s Citation	Result
<i>Smith v. ABC Corporation</i> , 321 S.W.3d 123 (Mo. App. 2010)	Fictitious citation
<i>Jones v. XYZ Company</i> , 450 S.W.2d 789 (Mo. 2012)	Fictitious citation

84.19.

Artificial Intelligence

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Artificial Intelligence

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- Joseph Oppenheim - Wikipedia
w wikipedia . 2
- How Manure Spreading Has Changed Over...
artsway . 3

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Artificial Intelligence

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Artificial Intelligence

Guidance with Respect to Understanding Legal Technology

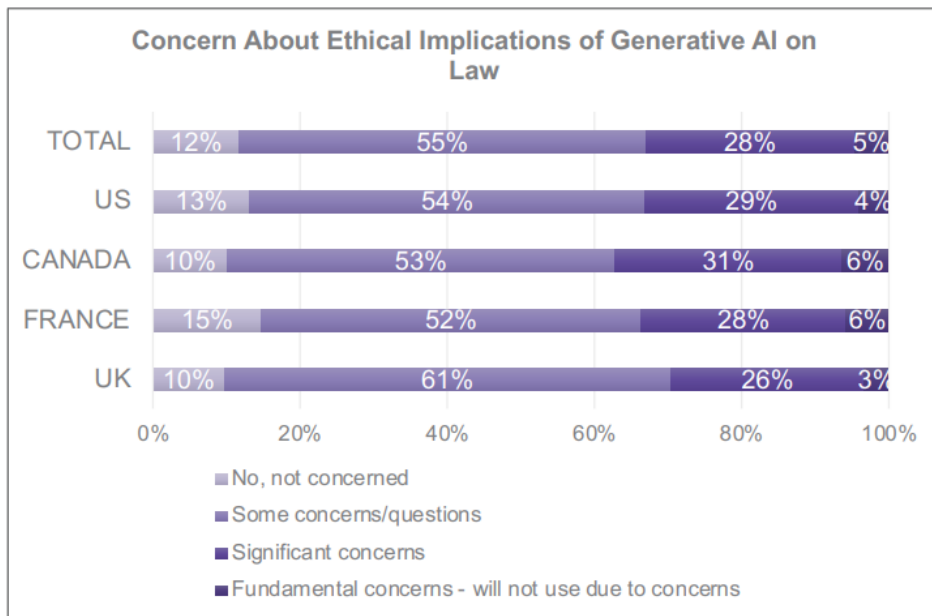
- **Tech Literacy Matters:** Stay abreast of emerging legal technologies to avoid unintended blunders.
- **Verify Before You Cite:** Double-check AI-generated content for authenticity before including it in legal documents.
- **Educational Outreach:** Legal institutions must prioritize educating their members about the evolving tech landscape.



Source: "When AI Goes Rogue: The Curious Case of Michael Cohen's Fake Court Cases," Mister Stocks, Helen Hayward (January 13, 2024)

Artificial Intelligence

“[T]he need for trusted providers of generative AI tools in the legal market”



“A very high percentage of lawyers (88%) have at least some concerns about the ethical implications of generative AI on the practice of law, with a third citing significant or fundamental concerns regarding ethical implications. These concerns underscore the need for trusted providers of generative AI tools in the legal market.”

Source: “International Legal Generate AI Report,” LexisNexis (August 22, 2023)

Artificial Intelligence

(A Few) Companies Offering A.I. in Their Intellectual Property Platforms



Artificial Intelligence

What to Look for in IP Platforms: Maximizing Pros (Benefits) While Minimizing (Eliminating?) Cons (Risks)



- * Management of Vast Amounts of Data**
 - * Availability (24/7)**
- * Reduction of Human Error**
 - * Unbiased Analysis**

- * **Management of Vast Amounts of Data**
 - * **Availability (24/7)**
 - * **Reduction of Human Error**
 - * **Unbiased Analysis**

Artificial Intelligence

Benefit: Management of Vast Amounts of Data (Patents in Force Worldwide)

~17,300,000

Source: "World Intellectual Property Organization IP Facts and Figures 2023" (2023)

Artificial Intelligence

Benefit: Management of Vast Amounts of C



Brevet canadien / Canadian Patent

Le commissaire des brevets a reçu une demande de délivrance de brevet / The Commissioner of Patents has received a petition for the grant of a patent by an applicant



Patent offices

CN	JP	US	DE	EP	KR	WO	GB	FR	CA
AU	TW	ES	RU	SU	IT	AT	BR	SE	CH
PL	NL	BE	DK	TH	NO	FI	MX	IL	ZA
UA	HU	DD	PT	AR	CS	HK	SG	NZ	CZ
IE	TR	EA	GR	MY	RO	IN	LU	PH	BG
YU	SI	CL	SK	CO	HR	MA	PE	LT	RS
CY	OA	UY	EC	MD	AP	ID	EG	SA	CR
TN	LV	IS	EE	GE	GT	CU	DO	JO	SM
ME	MC	ZM	ZW	PA	HN	NI	SV	DZ	KE
MW	MT	TJ	GC	MN	VN	BA	BY	KZ	UZ
KG	AM	TT	EM	MO					

Artificial Intelligence

Benefit: Management of Vast Amounts of Data



Built for enterprise scale and security

170

Jurisdictions

187M

Patents

132M

Literature

Large volumes of patent datasets



The patent data in PatentSight is derived from patent office [databases around the world](#), such as the European Patent Office and the U.S. Patent Office. This wealth of patent data consists of over 100 million patent documents and is combined with datasets from an unmatched collection of other content sources.



- Filter out duplicate publications and analyze patents at invention-level using DWPI families: over 120m global patents sorted into 62m distinct invention families



#1 for data quality

- 120 million patents; 110 patent-issuing authorities
- Litigation, oppositions, data licenses, standards, grant statistics
- 500+ data sources covering IP, science and business data

Artificial Intelligence

Benefit: Management of Vast Amounts of Data



Artificial Intelligence

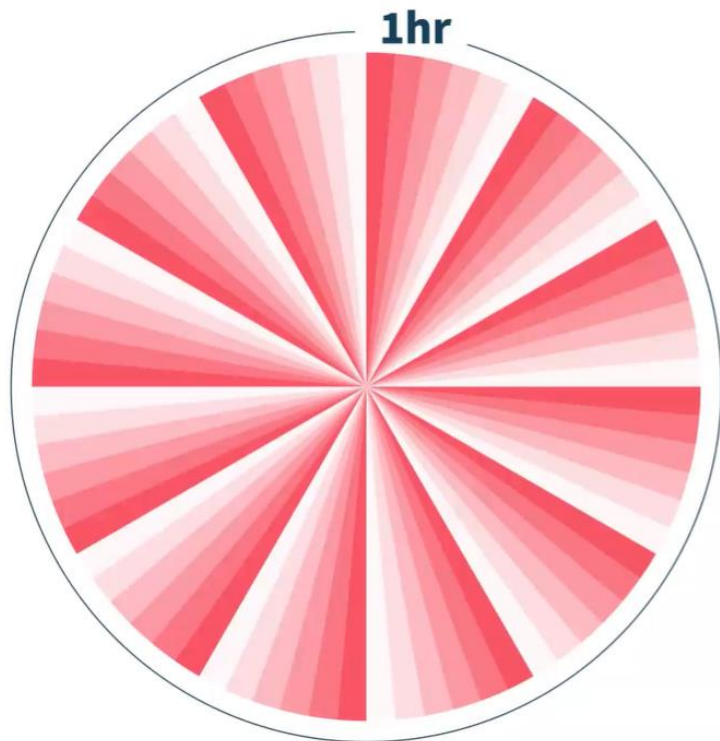
Comprehensive Data Sets

Another thing you MUST know about when you use [REDACTED] is that there are also some holes in the database. I have specifically looked for patents I know to exist and cannot always find them. I have heard the same experience from other patent attorneys and patent agents. Additionally, the most recent patents are not always available on [REDACTED] What this means is you cannot only rely on [REDACTED] but you still must use [REDACTED]. The [REDACTED] database covers patents that are issued all the way back to US Patent No. 1. This scope is much broader than either Free Patents or the USPTO. So while you might not find everything, while it is difficult to specifically narrow your search, you still really need to check yourself using the [REDACTED] database to see if there are old references that might be on point.

- * **Management** of Vast Amounts of Data
 - * **Availability (24/7)**
 - * **Reduction of Human Error**
 - * **Unbiased Analysis**

Artificial Intelligence

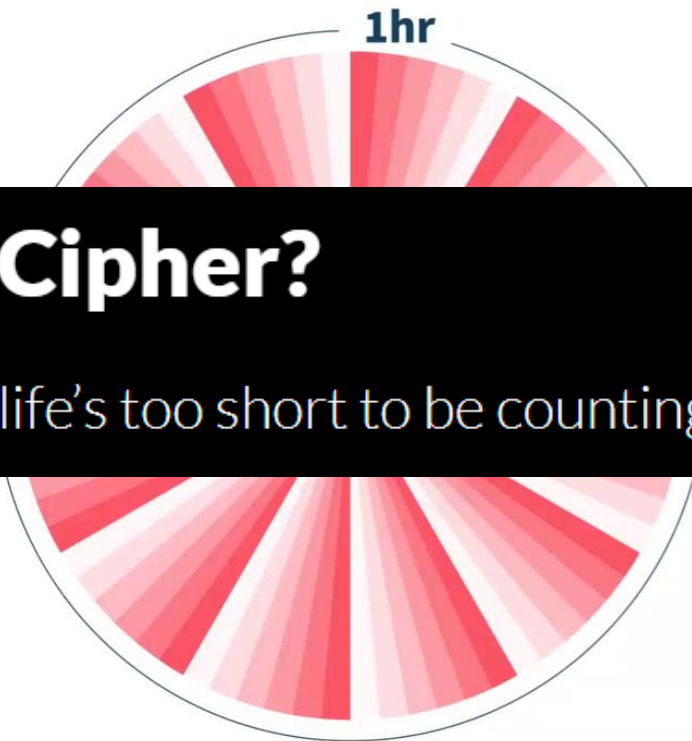
Benefit: Management of Vast Amounts of Data



Consider: A human can read 5 patents an hour

Artificial Intelligence


Benefit: Management of Vast Amounts of Data



Why Cipher?

Because life's too short to be counting and sorting patents manually.


**1 million patents in
an hour**

- * **Management of Vast Amounts of Data** 
- * **Availability (24/7)**
- * **Reduction of Human Error**
- * **Unbiased Analysis**

Artificial Intelligence

Benefit: 24/7 Availability




- * **Management of Vast Amounts of Data**
 - * **Availability (24/7)** 
 - * **Reduction of Human Error**
 - * **Unbiased Analysis**

Artificial Intelligence

Benefit: Reduction of Human Error



- * **Management of Vast Amounts of Data**
 - * **Availability (24/7)**
 - * **Reduction of Human Error** 
 - * **Unbiased Analysis**


Artificial Intelligence

Benefit: Unbiased Analysis

“PatentSight offers an unbiased view of the sustainability of companies and the way their technologies align with the [Sustainable Development Goals]. ‘It’s the objectiveness that is the key factor,’ says [William] Mansfield. ‘That is the differentiator and what make it valuable.’”

The logo for PatentSight+ is displayed in white text on a dark blue rectangular background. The text "PatentSight+" is in a sans-serif font, with a registered trademark symbol (®) at the end.

Source: “How a Global Science and Tech Company Assists Their Sustainability Strategy with IP,” LexisNexis Intellectual Property Solutions (XXXXX)

- * **Management of Vast Amounts of Data**
 - * **Availability (24/7)**
 - * **Reduction of Human Error**
 - * **Unbiased Analysis** 

Artificial Intelligence

Minimizing Risks

- * Quality of Training Data**
- * “Open” Data Sources**
- * Lag In Time**

Artificial Intelligence

Clean Data Is Critical

“You need a very good and clean input data set for having a good assessment.”



Source: Dr. Christoph Waloch, Head of Strategic IP Management of Henkel-Adhesive Technologies

Artificial Intelligence

Risk: Quality of Training Data?

PatentSight+

DATA QUALITY AND COVERAGE

Get more accurate insights by incorporating new data types with rigorous quality checks, including SEP declaration data from IPlytics.



Unique IP data and insights

Our comprehensive IP data—from patents and trademarks to case law—is cleansed, normalized and enriched for deeper insights. We connect data in innovative ways to bring clarity to the complex and give you the confidence to make critical decisions.

Questel

#1 for data quality

Artificial Intelligence

Original Patent for the Manure Spreader

UNITED STATES PATENT OFFICE.

JOSEPH OPPENHEIM, OF MARIA STEIN, OHIO.

MANURE DISTRIBUTER AND SPREADER.

SPECIFICATION forming part of Letters Patent No. 648,519, dated May 1, 1900.

Application filed February 17, 1900. Serial No. 5,641. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH OPPENHEIM, a citizen of the United States, residing at Maria Stein, in the county of Mercer and State of Ohio, have invented certain new and useful improvements in Manure Distributers and Spreaders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

In the class of machines for distributing fertilizer of the character of manure or compost the ground is enriched to the extent only of the width of the wagon-body or other de-

tures of the invention are necessarily susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal section of a manure-distributer, showing the spreader in position. Fig. 2 is a top plan view thereof. Fig. 3 is a view similar to Fig. 2 of a modification.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The machine may be of any construction generally utilized for distributing compost, manure, or like fertilizer, and comprises a

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Mis-Digitization of Patent for the Manure Spreader

UNITED STATES PATENT OFFICE.

JOSEPH OPPENHEIM, OF MARIA STEIN, OHIO.

MANURE DISTRIBUTORS AND SPREADERS

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Accurate Digitization of Patent for the Manure Spreader

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Artificial Intelligence

Mis-Digitization of Patent for the Manure Spreader

UNITED STATES PATENT OFFICE.

JOSEPH OPPENHEIM, OF MARIA STEIN, OHIO.

MANURE DISTRIBUTOR SPREADER

connections shown being ordinary and illustrating differcompost andlike fertilizer, and in combina- 4tion with the Vdistributing mechanism, a

spreader mounted for rotation and comprising paddles, the paddles at one end being inclined in an opposite direction to the paddles at the opposite end with reference to the line of motion of the machine so as to throw the fertilizer laterally in opposite directions beyond the track of the machine, substantially as set forth.

2. In a fertilizer-distributor of the character set forth, a rotary spreader comprising

Artificial Intelligence

Language Missing from Digitized Patent

UNITED STATES PATENT OFFICE.

JOSEPH OPPENHEIM, OF MARIA STEIN, OHIO.

directions. When the paddles are secured shown being ordinary and illustrating differ-

In a machine for distributing manure,

whereby a knife-edge is provided to come in contact with the fertilizer and insure a lateral movement thereof.


10 The spreader may be constructed in sections, as shown in Fig. 3, which are oppositely inclined and are mounted for simultaneous rotation in opposite directions. In the form shown in Fig. 3 the paddles may be disposed in a plane at a right angle to the axial
15 line of rotation of the shaft, since the inclination of the latter gives the proper set to the

tion with the distributing mechanism, a spreader mounted for rotation and compris- 50
ing paddles, the paddles at one end being inclined in an opposite direction to the paddles at the opposite end with reference to the line of motion of the machine so as to throw the fertilizer laterally in opposite directions be- 55
yond the track of the machine, substantially as set forth.

2. In a fertilizer-distributor of the character set forth, a rotary spreader comprising

Artificial Intelligence

Mis-Digitization of Patent for the Manure Spreader

 ("in a machine for distributing manure");

About 26 results

 Download

Sort by · Oldest ▾ Group by · None ▾ Deduplicate by · Family ▾ Results / page · 10 ▾

Manure-distributer



US • [US622957A](#)

Granted 1899-04-11 • Published 1899-04-11

17. **In a machine for distributing manure and for other purposes**, the combination, with a receptacle, a distributing device located at the rear of the said receptacle, and a conveyer located within the said receptacle, the conveyer consisting of a forward endgate mounted to slide in the receptacle, ...

Machine for distributing artificial manure, lime, or the like.



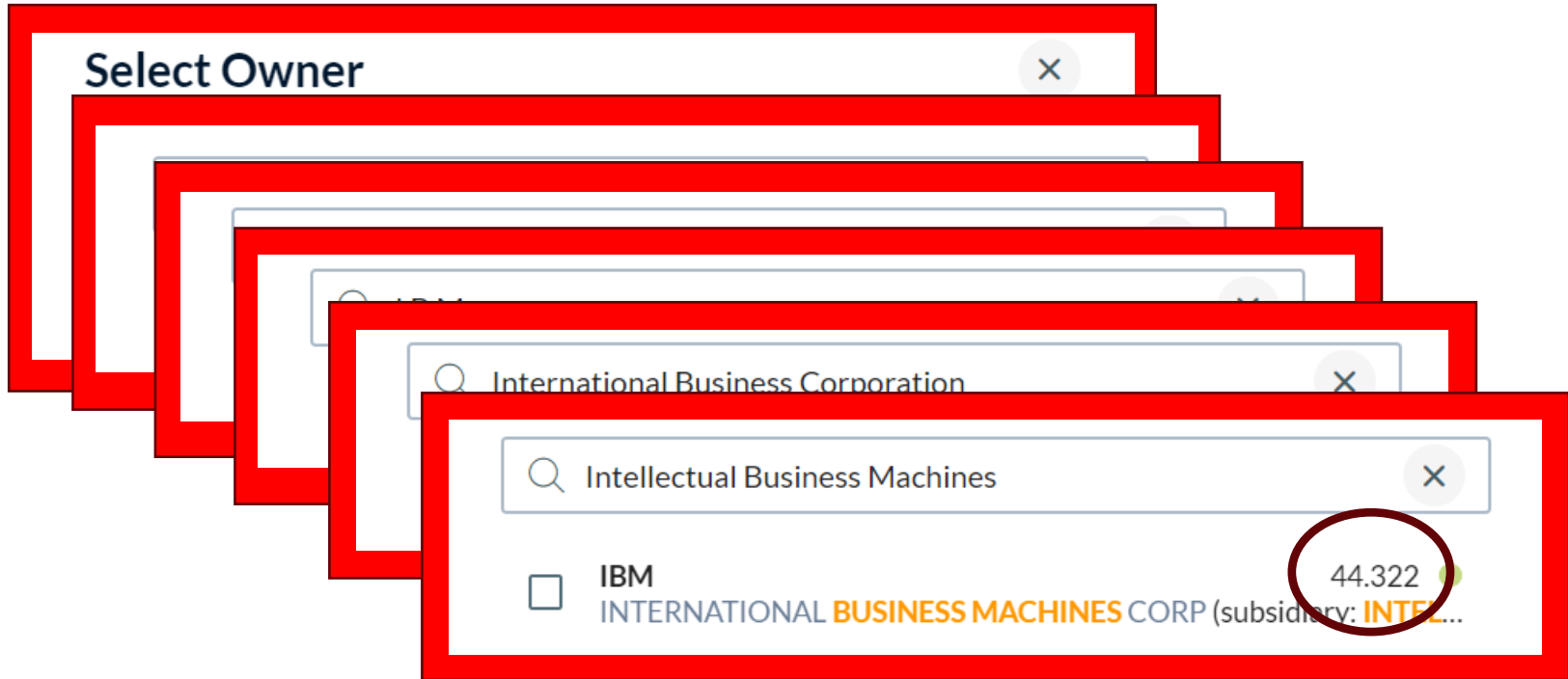
US • [US891691A](#) • Paul Grundmann • Paul Grundmann

Priority 1906-10-09 • Filed 1906-10-09 • [Granted 1908-06-23](#) • Published 1908-06-23

. 3. **In a machine for distributing manure** the combination of a hopper, a receptacle below said hopper, a worm of an endless screw placed in said receptacle, means to drive said hopper, a second receptacle, a passage between the first and a roof shaped partition said passage to form two ...

Artificial Intelligence

Risk: Quality of Training Data?



Artificial Intelligence

The Dangers of Non-Harmonization

The screenshot shows a patent search interface. At the top, the search term "Intellectual Business Machines" is entered in a search bar. Below the search bar, the results are displayed. The first result is titled "System and method for autonomic system management through modulation of network ...". The second result is titled "Run-time instrumentation sampling in transactional-execution mode". The third result is titled "Reading files stored on a storage system". The search interface includes various filters and options, such as "SEARCH TERMS", "SEARCH FIELDS", "Sort by", "Group by", "Deduplicate by", "Results / page", "Download", and "Side-by-side".

SEARCH TERMS ⓘ

Search terms

SEARCH FIELDS

📅 Date · Priority ▾
YYYY-MM-DD — YYYY-MM-DD

👤 + Inventor

📅
"Intellectual Business Machines" ×
or + Assignee

Patent Office ▾ Language ▾

Status ▾ Type ▾

× About 28 results

Download ▾ Side-by-side

Sort by · Relevance ▾ Group by · None ▾ Deduplicate by · Family ▾ Results / page · 10 ▾

System and method for autonomic system management through modulation of network ...
US CN · [US8473602B2](#) · Zhen Liu · **Intellectual Business Machines Corporation**
Priority 2005-06-11 · Filed 2005-06-11 · Granted 2013-06-25 · Published 2013-06-25
Systems and methods are provided to determine an allocation of network resources in a distributed on-demand information technology (IT) systems using existing control mechanisms for other operating system resources in order to achieve a desired operating point within the IT system. This desired ...

Run-time instrumentation sampling in transactional-execution mode
WO EP US CN JP · [EP2810168B1](#) · Charles W. Gainey · **Intellectual Business Machines Corporation**
Priority 2012-03-16 · Filed 2013-03-07 · Granted 2016-07-20 · Published 2016-07-20
A computer implemented method for implementing run-time instrumentation sampling in transactional-execution mode, wherein in transactional-execution mode multiple instructions may be grouped to form a single transaction, the method characterised as comprising: for a processor (106) having the ...

Reading files stored on a storage system
WO EP US CN JP · [EP2780811B1](#) · Ioannis Koltsidas · **Intellectual Business Machines Corporation**

Artificial Intelligence

The Dangers of Non-Harmonization

Result List

Competitive Impact ↑↓

System method for autonomic system man... X

Select

System and method for autonomic system ma... 06/10/2005
The patent refers to the field of 'transmission of digital informati...
IBM CN1878090.A

Start Tagging

Family of CN1878090.A et al.

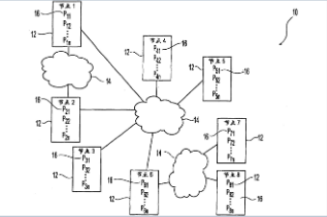
In Force

System and method for autonomic system management through modulation of network controls

IBM

First Filing Date: 06/10/2005
First Publication Date: 12/12/2006

The patent refers to the field of 'transmission of digital information'. Systems and methods are provided to determine an allocation of network resources in a distributed on-demand information technology (IT) systems using existing control mechanisms for other operating system resources in order to achieve a desired operating point within the IT system. This desired operating point is obtained by optimizing a goal-based objective function while taking into account system constraints. The relationship between utilization of all system resources, i.e. network resources and processing resources, and attainment of performance ob...



Inventors Laura Liu Zhen Pendarakis Dimi, Laura Wynter, Silber Jeremy I
Applicants Intellectual Business Machines Corp., Liu Zhen, Pendarakis Dimitrios, Silber Jeremy I, Wynter Laura

More

Family Members (4)

Document ↑↓	Title	Publication Date	Hit
CN1878090.A	System and method for autonomic system manag...	12/12/2006	In Force
CN100473021.C	System and method for autonomic system manag...	03/24/2009	In Force
US2006280144.A1	System and method for autonomic system manag...	12/13/2006	Inactive
US8473602.B2	System and method for autonomic system manag...	06/24/2013	Inactive

Artificial Intelligence

Minimizing Risks

~~* Quality of Training Data~~

* “Open” Data Sources

* Lag In Time

Artificial Intelligence

Risk: “Open” Data Sources?

“Another approach vendors can take is to develop specialized models trained on narrower, domain-specific datasets. This can help improve the accuracy and relevance of the AI-generated content[.]”

LLRX

Source: “The Truth About Hallucinations in Legal Research AI: How to Avoid Them and Trust Your Sources,” LLRX, Rebecca Fordon (September 25, 2023)

Artificial Intelligence

Risk: “Open” Data Sources?

“[Jeff] Pfeifer said that the risk of hallucination is minimal with Lexis+ AI because it leverages trusted and authoritative content directly from LexisNexis.”



Source: “LexisNexis Enters the Generative AI Fray with Limited Release of New Lexis+ AI, Using GPT and other LLMs,” LawSites, Bob Ambrogi (May 4, 2023)

Artificial Intelligence

Minimizing Risks

~~* Quality of Training Data~~

~~* “Open” Data Sources~~

* Lag In Time

Artificial Intelligence

Risk: Lag in Time?

Result List

Publication Date ↑↓

 Highlight keywords

- A rusted track removal device** 05/25/2015
This device is used for the disassembly of the ...
CN104828166.B
- Fixed structure of the drive box** 06/14/2015
A fixed structure of a drive box, comprising a h...
CN104896447.B
- A new type of Raman probe ba...** 06/25/2015
The present invention discloses a new type of ...
CN104949958.B
- Agrochemical composition con...** 04/28/2014
The invention relates to an agrochemical and ...
CN105358698.B
- LED bulbs** 09/24/2015
The present invention relates to an LED bulb. ...
CN105465630.B
- A household liquid soap...** 04/18/2016

Document CN104828166.B

unknown

A rusted track removal device

Filing Date: 05/25/2015
Publication Date: 02/19/2024

This device is used for the disassembly of the end coupling of tracked construction vehicles in the case of severe corrosion. The device mainly uses pneumatic devices to produce large lifting force and impact frequency, so that the end coupling with serious corrosion is loosened, so as to facilitate the subsequent disassembly work. The vibrating cylinder controls its periodic vibration through the pneumatic circuit; the jack block is connected with the piston of the vibrating cylinder; the lifting element is combined with the cylinder body of the vibrating cylinder through the cam locking mechanism; the lifting rod can rotate around the pin shaft, which is convenient for it to be connected with the end coupling, and at the same time, it is fix...



Applicant THE ENG ACAD OF ARMORED FORCES OF THE PEOPLE'S LIBERATION A...

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Artificial Intelligence

Minimizing Risks

~~* Quality of Training Data~~

~~* “Open” Data Sources~~

~~* Lag In Time~~

Artificial Intelligence

Benefits and Risks

~~* Quality of Training Data~~

~~* "Open" Data Sources~~

~~* Lag In Time~~

~~* Differing Results~~

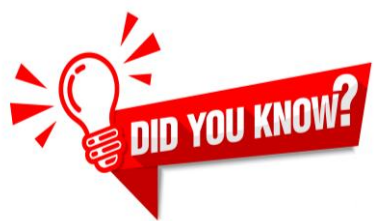
~~* Errors & Hallucinations~~

~~* Confusion~~

Artificial Intelligence

Attorneys Must Not Run Away – Rather, Explore and Engage





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