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Artificial Intelligence and Automated Systems Legal Update (3Q20)

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The third quarter of 2020 saw a noticeable surge in Artificial Intelligence ("AI")-related regulatory and policy proposals. The European Union ("EU") has emerged as a pacesetter in AI regulation, taking significant steps towards a long-awaited comprehensive and coordinated regulation of AI at EU level—evidence of the European Commission's (the "Commission") ambition to exploit the potential of the EU's internal market and position itself as a major player in sustainable technological innovation. In this update, we review some of the recent policy initiatives in the EU ahead of the Commission's long-awaited legislative proposals expected in early 2021.

In the U.S., the third quarter of 2020 saw a number of bipartisan bills passed in the U.S. House of Representatives seeking to develop and refine U.S. national AI policy and adopt measures promoting the ethical and equitable use of AI technologies and consumer protection measures.

As global AI policy develops, we are observing some interesting themes emerging, one of which is stakeholders' varying levels of comfort with the lack of a universal definition of AI. Some commentators have suggested that undue effort should not be expended on defining AI since it is a dynamic technology that will continue to change.[1] At the same time, global lawmakers are already reviewing and passing regulations that focus on certain categories of AI, often in the absence of clear definitions and delineations between certain AI applications that will impact the scope of regulation (*see, e.g.*, the European Parliament's discussion about a possible regulation of "all" AI applications, discussed further at **I.** below), creating legal uncertainty for regulators and businesses alike. We will continue to monitor these policy trends and provide a comprehensive analysis in our forthcoming 2020 Artificial Intelligence and Automated Systems Annual Legal Review.

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I. EU LEGISLATION & POLICY

In past years, EU discussions about regulating AI technologies had been characterized by a restrictive "regulate first" approach.[2] However, the regulatory road map presented by the Commission in February under the auspices of its new digital strategy eschewed, for

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example, blanket technology bans and proposed a more nuanced "risk-based" approach to regulation, emphasizing the importance of "trustworthy" AI but also acknowledging the need for Europe to both remain innovative and competitive in a rapidly growing space and avoid fragmentation of the single market resulting from differences in national legislation. As discussed further below, there is some evidence of a growing dissonance between EU members with respect to the balance between technological innovation and risk, and a European consensus on a harmonized legal framework is far from realized.

The Commission's "White Paper on Artificial Intelligence – A European approach to excellence and trust" (the "White Paper") sets out a road map designed to balance innovation, ethical standards and transparency.[3] As noted in our client alert "EU Proposal on Artificial Intelligence Regulation Released," the White Paper favors a risk-based approach with sector- and application-specific risk assessments and requirements, rather than blanket sectoral requirements or bans—earmarking a series of "high-risk" technologies for future oversight, including those in "critical sectors" and those deemed to be of "critical use."[4] The Commission also released a series of accompanying documents: the "European Strategy for Data" ("Data Strategy")[5] and a "Report on the Safety and Liability Implications of Artificial Intelligence, the Internet of Things and Robotics" ("Report on Safety and Liability").[6]

While the Commission's comprehensive legislative proposal is not anticipated before early 2021, the EU policy landscape remains dynamic. Companies active in AI should closely follow recent developments in the EU, given the proposed geographic reach of the future AI legislation, which is likely to affect all companies doing business in the EU.

A. European Commission's AI White Paper Consultation and "Inception Impact Assessment"

As we reported in our Artificial Intelligence and Automated Systems Legal Update (1Q20), in January 2020, the EC launched a public consultation period and requested comments on the proposals set out in the White Paper and the Data Strategy, providing an opportunity for companies and other stakeholders to provide feedback and shape the future EU regulatory landscape. The consultation closed on June 14. In July, the Commission published a summary report on the consultation's preliminary findings.[7] Over 1,250 stakeholders from all over the world responded, providing feedback on the proposed policy and regulatory framework on AI. Respondents raised concerns about the potential for AI to breach fundamental rights or lead to discriminatory outcomes, but they were divided on whether new compulsory requirements should be limited to high-risk applications.

On the heels of the White Paper Consultation, the Commission launched an "Inception Impact Assessment" initiative for AI legislation in July, aiming to define the Commission's scope and goals for AI legislation with a focus on ensuring that "AI is safe, lawful and in line with EU fundamental rights."[8] The Commission's road map builds on the proposals in the White Paper and provides more detail on relevant policy options and policy instruments, from a "baseline" policy (involving no policy change at the EU level) through various alternative options following a "gradual intervention logic," ranging from a nonlegislative, industry-led, "soft law" approach (Option 1) through a voluntary labelling scheme (Option 2), to comprehensive and mandatory EU-level legislation for all or certain types of AI applications (Option 3), or a combination of any of the options above taking into account the different levels of risk that could be generated by a particular AI application (Option 4).[9] Another core question relates to the scope of the initiative, notably how AI should be defined (narrowly or broadly) (e.g., machine learning, deep neural networks, symbolic reasoning, expert systems, automated decision-making).

Substantively, the road map reiterates that the Commission is particularly concerned with a number of specific, significant AI risks that are not adequately covered by existing EU legislation, such as cybersecurity, the protection of employees, unlawful discrimination or bias, the protection of EU fundamental rights, including risks to privacy, and protecting

consumers from harm caused by AI (both through existing and new product safety legislation). Continued focus remains on the need for legal certainty, both for businesses marketing products involving AI in the EU, and for market surveillance and supervisory authorities. The feedback period for the road map closed in September, and the completion of the Inception Impact Assessment is scheduled for December 2020. As noted, these policy proposals are intended to culminate in proposed regulation, which is expected to be unveiled by the Commission in the first quarter of 2021.

B. European Parliament Votes on Proposals regarding the Regulation of Artificial Intelligence

Earlier this year, the European Parliament (the "Parliament") set up a special committee to analyze the impact of artificial intelligence on the EU economy.[10] The new committee chair, Drago? Tudorache, noted that "Europe needs to develop AI that is trustworthy, eliminates biases and discrimination, and serves the common good, while ensuring business and industry thrive and generate economic prosperity."[11]

In April, the Parliament's Legal Affairs Committee ("JURI") published three draft reports to the Commission providing recommendations on a framework for AI liability, copyright protection for AI-assisted human creations, safeguards within the EU's patent system to protect the innovation of AI developers, and AI ethics and "human-centric AI."[12] The three legal initiatives, summarized in final reports and recommendations outlined in more detail below, were adopted by the plenary on October 20, 2020.[13]

1. Report with Recommendations to the Commission on a Framework of Ethical Aspects of Artificial Intelligence, Robotics and Related Technologies

The legislative initiative urges the Commission to present a legal framework outlining the ethical principles and legal obligations to be followed when developing, deploying and using artificial intelligence, robotics and related technologies in the EU including software, algorithms and data, protection for fundamental rights. The initiative also calls for the establishment of a "European Agency for Artificial Intelligence" and a "European certification of ethical compliance."[14]

The proposed legal framework is premised on several guiding principles, including "human-centric and human-made AI; safety, transparency and accountability; safeguards against bias and discrimination; right to redress; social and environmental responsibility; and respect for privacy and data protection."[15] High-risk AI technologies, which include machine learning and other systems with the capacity for self-learning, should be designed to "allow for human oversight and intervention at any time, particularly where a functionality could result in a serious breach of ethical principles and could be dangerous."[16] Some of the high-risk sectors identified are healthcare, public sector and finance, banking and insurance.

2. Report with Recommendations to the Commission on a Civil Liability Regime for Artificial Intelligence

The Report calls for a future-oriented civil liability framework that makes front- and back-end operators of high-risk AI strictly liable for any resulting damage and provides a "clear legal framework [that] would stimulate innovation by providing businesses with legal certainty, whilst protecting citizens and promoting their trust in AI technologies by deterring activities that might be dangerous."[17] While it does not take the position that a new EU liability regime is necessary, the Report identifies a gap in the existing EU product liability regime with respect to the liability of operators of AI-systems in the absence of a contractual relationship with potential victims, proposing a dual approach: (1) strict liability for operators of "high-risk AI-systems" akin to the owner of a car or pet; or (2) a presumption of fault towards the operator for harm suffered by a victim by a non-"high-risk" AI system, with national law regulating the amount and extent of compensation as well as the limitation period in case of harm caused by the AI-system.[18] Multiple

operators would be held jointly and severally liable, subject to a maximum liability of €2 million. The Report defines criteria on which AI-systems can qualify as high-risk in the Annex, proposing that a newly formed standing committee, involving national experts and stakeholders, should support the Commission in its review of potentially high-risk AI-systems.

3. Report on Intellectual Property Rights for the Development of Artificial Intelligence Technologies

The Report emphasizes that EU global leadership in AI requires an effective intellectual property rights ("IP") system and safeguards for the EU's patent system in order to protect and incentivize innovative developers, balanced with the EU's ethical principles for AI and consumer safety.[19] Notably, the Report distinguishes between AI-assisted human creations and AI-generated creations, taking the position that AI should not have a legal personality and that ownership of IP rights should only be granted to humans. Where AI is used only as a tool to assist an author in the process of creation, the current IP legal framework should remain applicable. Nonetheless, the Report recommends that AI-generated creations should fall under the scope of the EU IP regime in order to encourage investment and innovation, subject to protection under a specific form of copyright.

C. A Lack of Consensus between EU Members on the Balance to Be Struck between Innovation and Safety

Although the Commission is seeking to impose a comprehensive and harmonious framework for AI regulation across all member states, it is far from clear that consensus exists as to the scope of regulatory intervention. In October, 14 EU members (Denmark, Belgium, the Czech Republic, Finland, France, Estonia, Ireland, Latvia, Luxembourg, the Netherlands, Poland, Portugal, Spain and Sweden) published a joint position paper urging the Commission to espouse a "soft law approach" that takes into account the fast-evolving nature of AI technologies.[20] The paper calls for the adoption of "self-regulation, voluntary labelling and other voluntary practices as well as a robust standardisation process as a supplement to existing legislation that ensures that essential safety and security standards are met" to allow regulators to learn from technology and identify potential regulatory challenges without stymieing innovation.

This approach may be met with challenge from Germany, the current chair of the EU presidency, which has expressed concern over certain Commission proposals to apply restrictions on AI applications deemed to be of high-risk only, and would prefer a broader regulatory reach for technologies that would be subject to the new framework, as well as mandatory, detailed rules for data retention, biometric remote identification and human supervision of AI systems.[21]

On November 5, a German AI inquiry committee (Enquete-Kommission Künstliche Intelligenz des Deutschen Bundestages, hereafter the "Committee") presented its final report, which provides broad recommendations on how society can benefit from the opportunities inherent in AI technologies (defined in the report as "lernende Systeme" or "self-learning systems") while acknowledging the risks they pose. The Committee's work placed a focus on legal and ethical aspects of AI and its impact on the economy, public administration, cybersecurity, health, work, mobility, and the media.[22] The Committee advocates for a "human-centric" approach to AI, a harmonious Europe-wide strategy, a focus on interdisciplinary dialog in policy-making, setting technical standards, legal clarity on testing of products and research, and the adequacy of digital infrastructure. At a high level, the Committee's specific recommendations relate to (1) data-sharing and data standards; (2) support and funding for research and development; (3) a focus on "sustainable" and efficient use of AI; (4) incentives for the technology sector and industry to improve scalability of projects and innovation; (5) education and diversity; (6) the impact of AI on society, including the media, mobility, politics, discrimination and bias; and (7) regulation, liability and trustworthy AI. The committee was set up in late 2018 and comprises 19 members of the German parliament and 19 external experts. We will provide

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a more detailed analysis of the Committee's final report in our forthcoming 2020 Artificial Intelligence and Automated Systems Annual Legal Review.

D. UK ICO Guidance on AI and Data Protection

On July 30, 2020, the UK Information Commissioner's Office ("ICO") published its final guidance on Artificial Intelligence (the "Guidance").[23] Intended to help organizations "mitigate the risks of AI arising from a data protection perspective without losing sight of the benefits such projects can deliver," the Guidance sets out a framework and methodology for auditing AI systems and best practices for compliance with the UK Data Protection Act 2018 and data protection obligations under the EU's General Data Protection Regulation ("GDPR"). The Guidance proposes a "proportionate and risk-based approach" and recommends an auditing methodology consisting of three key parts: auditing tools and procedures for use in audits and investigations; detailed guidance on AI and data protection; and a tool kit designed to provide further practical support to organizations auditing the compliance of their own AI systems (which is forthcoming). The guidance addresses four overarching principles:

1. *Accountability and governance in AI*—including data protection impact assessments ("DPIAs"), understanding the relationship and distinction between controllers and processors in the AI context, as well as managing, and documenting decisions taken with respect to competing interests between different AI-related risks (e.g., trade-offs);

2. *Fair, lawful and transparent processing*—including how to identify lawful bases (and using separate legal bases for processing personal data at each stage of the AI development and deployment process), assessing and improving AI system performance, mitigating potential discrimination, and documenting the source of input data as well as any inaccurate input data or statistical flaw that might impact the output of the AI system.

3. *Data minimization and security*—including guidance to technical specialists on data security issues common to AI, types of privacy attacks to which AI systems are susceptible, compliance with the principle of data minimization (the principle of identifying the minimum amount of personal data needed, and to process no more than that amount of information), and privacy-enhancing techniques that balance the privacy of individuals and the utility of a machine learning system during the training and inference stages.[24]

4. *Compliance with individual data subject rights*—including data subject rights in the context of data input and output of AI systems, rights related to automated decision, and requirements to design AI systems to facilitate effective human review and critical assessment and understanding of the outputs and limitations of AI systems.

The Guidance also emphasizes that data protection risks should be considered at an early stage in the design process (e.g., "safety by design") and that the roles of the different parties in the AI supply chain should be clearly mapped at the outset. Of note is also the recommendation that training data be stored at least until a model is established and unlikely to be retrained or modified. The Guidance refers to, but does not provide guidance on, the anonymization or pseudonymization of data as a privacy-preserving technique, but notes that the ICO is currently developing new guidance in this field.[25]

The ICO encourages organizations to provide feedback on the Guidance to make sure that it remains "relevant and consistent with emerging developments."

II. U.S. FEDERAL LEGISLATION & POLICY

A. AI in Government Act of 2020 (H.R. 2575)

First introduced by Rep. Jerry McNerney (D-CA) on May 8, 2019, the AI in Government Act of 2020 (H.R. 2575) was passed by the House on September 14, 2020 by voice vote.[26] The bill aims to promote the efforts of the federal government in developing innovative uses of AI by establishing the "AI Center of Excellence" within the General Services Administration ("GSA"), and requiring that the Office of Management and Budget ("OMB") issue a memorandum to federal agencies regarding AI governance approaches. It also requires the Office of Science and Technology Policy to issue guidance to federal agencies on AI acquisition and best practices.

Senators Rob Portman (R-OH) and Cory Gardner (R-CO) are cosponsoring an identical bill, S. 1363, which was approved by the U.S. Senate Homeland Security and Governmental Affairs Committee in November 2019.[27] Sen. Portman described the bipartisan legislation, which remains pending in the Senate, as "the most significant AI policy change ever passed by Congress."

B. Consumer Safety Technology Act (H.R. 8128)

On September 29, the House passed the Consumer Safety Technology Act (H.R. 8128), previously named the "AI for Consumer Product Safety Act." If enacted, the bill would direct the U.S. Consumer Product Safety Commission ("CPSC") to establish a pilot program to explore the use of artificial intelligence for at least one of the following purposes: (1) tracking injury trends; (2) identifying consumer product hazards; (3) monitoring the retail marketplace for the sale of recalled consumer products; or (4) identifying unsafe imported consumer products. The bill has been referred to the Senate Committee on Commerce, Science, and Transportation.

C. Bipartisan U.S. Lawmakers Introduce Legislation to Create a National AI Strategy

On September 16, 2020, Reps. Robin Kelly (D-Ill.) and Will Hurd (R-Texas), after coordination with experts and the Bipartisan Policy Center, introduced a concurrent resolution calling for the creation of a national AI strategy.[28] This Resolution proposes four pillars to guide the strategy:[29]

- Workforce: Fill the AI talent gap and prepare American workers for the jobs of the future, while also prioritizing inclusivity and equal opportunity;[30]
- National Security: Prioritize the development and adoption of AI technologies across the defense and intelligence apparatus;
- Research and Development: Encourage the federal government to collaborate with the private sector and academia to ensure America's innovation ecosystem leads the world in AI; and
- Ethics: Develop and use AI technology in a way that is ethical, reduces bias, promotes fairness, and protects privacy.

D. Artificial Intelligence Education Act

On September 24, 2020, Reps. Paul D. Tonko (D-NY) and Guy Reschenthaler (R-PA) introduced the Artificial Intelligence Education Act (H.R. 8390).[31] The bipartisan legislation would establish grant support within the National Science Foundation to fund the creation of easily accessible K-12 lesson plans for schools and educators.[32] The bill has been referred to the Committee on Science, Space, and Technology and the Committee on Education and Labor.

III. INTELLECTUAL PROPERTY

A. USPTO Releases Report on Artificial Intelligence and Intellectual Property Policy

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On October 6, 2020, the U.S. Patent and Trademark Office ("USPTO") published a report "Public Views on Artificial Intelligence and Intellectual Property Policy" (the "Report").[33] The Report catalogs the roughly 200 comments received in response to the USPTO's request for comments issued in October 2019 (as reviewed in our client alert USPTO Requests Public Comments On Patenting Artificial Intelligence Inventions).[34] The USPTO requested feedback on issues such as whether current laws and regulations regarding patent inventorship and authorship of copyrighted work should be revised to take into account contributions other than by natural persons.

A general theme that emerges from the report is concern over the lack of a universally acknowledged definition of AI, and a majority view that current AI (i.e., AI that is not considered to be artificial general intelligence, or "AGI") can neither invent nor author without human intervention. The comments also suggested that existing U.S. intellectual property laws are "calibrated correctly to address the evolution of AI" (although commenters were split as to whether any new classes of IP rights would be beneficial to ensure a more robust IP system), and that "human beings remain integral to the operation of AI, and this is an important consideration in evaluating whether IP law needs modification in view of the current state of AI technology."[35]

The key comments sound in eight categories:

1. Elements of an AI Invention

AI has no universally recognized definition, but can be understood as computer functionality that mimics human cognitive functions, e.g., the ability to learn. AI inventions include inventions embodying an advance in AI itself (e.g., improved models or algorithms), inventions that apply AI to a field other than AI, and inventions produced by AI itself. The current state of the art is limited to 'narrow' AI, as opposed to artificial general intelligence akin to human intelligence.

2. Conception and Inventorship

The vast majority of public commenters asserted that current inventorship law is equipped to handle inventorship of AI technologies and that the assessment of conception should remain fact-specific. The use of an AI system as a tool by a natural person does not generally preclude a natural person from qualifying as an inventor if he or she contributed to the conception of the claimed invention. Many commenters took issue with the premise that, under the current state of the art, AI systems were advanced enough to "conceive" of an invention. As one commenter put it, "the current state of AI technology is not sufficiently advanced at this time and in the foreseeable future so as to completely exclude the role of a human inventor in the development of AI inventions."[36] Some commenters suggested that the USPTO should revisit the question when machines begin achieving AGI (i.e., when science agrees that machines can "think" on their own). A minority of commenters suggested that AGI was a present reality that needed to be addressed today.

3. Ownership of AI Inventions

The vast majority of commenters stated that no changes should be necessary to the current U.S. law—that only a natural person or a company (via assignment) should be considered the owner of a patent or an invention. However, a minority of responses stated that while inventorship and ownership rights should not be extended to machines, consideration should be given to expanding ownership to a natural person who trains an AI process, or who owns/controls an AI system.

4. Subject Matter Eligibility under 35 U.S.C. § 101

Many commenters asserted that there are no patent eligibility considerations unique to AI Inventions, and that AI inventions should not be treated any differently than other computer-implemented inventions. This is consistent with how the USPTO currently

examines AI inventions today: claims to an AI invention that fall within one of the four statutory categories and are patent-eligible under the *Alice/Mayo* test[37] will be patent subject matter-eligible under 35 U.S.C. § 101. While some AI inventions may not pass muster under the subject matter eligibility analysis because they can be characterized as certain methods of organizing human activity, mental processes, or mathematical concepts, as one commenter noted, the complex algorithms that underpin AI inventions have the ability to yield technological improvements. In addition, claims directed to an abstract idea will still be patent-eligible if the additional claim elements, considered individually or as an ordered combination, amount to significantly more than the abstract idea so as to transform them into patent-eligible subject matter.

5. Written Description and Enablement under 35 U.S.C. § 112(a)

The majority of commenters agreed that there are no unique disclosure considerations for AI inventions. One commenter stated that the principles set forth in the USPTO's examiner training materials regarding computer-implemented inventions "are similarly applicable to AI-related inventions as to conventional algorithmic solutions." However, some commenters indicated that there are significant and unique challenges to satisfying the disclosure requirements for an AI invention since even though the input and output may be known by the inventor, the logic in between is in some respects unknown. Commenters noted that proper enforcement of the description requirement is imperative for patent quality. USPTO takes the position that whether a specification provides enabling support for the claimed invention is "intensely fact-specific."

Commenters suggest that there are differing views on the predictability of AI systems. One commenter stated that "most current AI systems behave in a predictable manner and that predictability is often the basis for the commercial value of practical applications of these technologies." Others noted that some AI inventions may operate in a black box because there is an "inherent randomness in AI algorithms," making it appropriate to "apply the written description requirement and the enablement factors from *In re Wands*."[38]

Commenters presented differing views as to the predictability of AI inventions. Some explained that AI inventions generally behave predictably in their practical applications (that fact being a basis for their commercial value), whereas some AI inventions might be less predictable due to inherent randomness in their algorithms. This unpredictability may make it appropriate to consider established factors such as the level of predictability in the art, amount of direction provided by the inventor, existence of working examples, and quantity of experimentation necessary to make or use the invention based on the content of the disclosure.

6. Level of Ordinary Skill in the Art

The USPTO noted that AI is capable of being applied to various disciplines, a tendency that requires an assessment of how it is affecting seemingly disparate fields of innovation since it may have "the potential to alter the skill level of the hypothetical 'ordinary skilled artisan,' thereby affecting the bar for nonobviousness." Many commenters asserted that AI has the potential to affect the level of ordinary skill in an art and that the present legal framework for assessing the person of ordinary skill in the art is "adequate to determine the impact of AI-based tools in a given field." However, commenters cautioned that widespread use of AI systems have not yet permeated all fields and discouraged the USPTO from declaring that the application of conventional AI is an exercise of ordinary skill in the art.

7. Prior Art Considerations

The majority of commenters stated that there were no prior art considerations unique to AI inventions and that current standards were sufficient. However, some commenters indicated that there were prior art considerations unique to AI inventions, many of which focused on the proliferation of prior art, such as the generation of prior art by AI, and the

difficulty in finding prior art, such as source code related to AI. Others indicated that while no prior art considerations unique to AI inventions currently existed, depending on how sophisticated AI becomes in the future, unique AI prior art could become relevant. Among all the responses, a common theme was the importance of examiner training and providing examiners with additional resources for identifying and finding AI-related prior art.

8. New IP Protections for Data Protection and Other Issues

The USPTO noted that data protection under current U.S. law is limited in scope, and the U.S. does not currently have intellectual property rights protections solely focused on data for AI algorithms. In their responses to the question of whether any new forms of IP protections are needed for AI inventions, commenters noted the importance of "big data" in developing and training AI systems, but were equally divided between the view that new intellectual property rights were necessary to address AI inventions and the belief that the current U.S. IP framework was adequate to address AI inventions. Generally, however, commenters who did not see the need for new forms of IP rights suggested that developments in AI technology should be monitored to ensure needs were keeping pace with AI technology developments.

Those requesting new IP rights focused on the need to protect the data associated with AI, particularly in the context of machine learning systems. One opinion stated that companies that collect large amounts of data have a competitive advantage relative to new entrants to the market and that "[t]here could be a mechanism to provide access to the repositories of data collected by large technology companies such that proprietary rights to the data are protected but new market entrants and others can use such data to train and develop their AI."[39] Commentators took the view that training data is currently protectable as a trade secret or, in the event that the training data provides some new and useful outcome, as a patent, but thought that there may be gaps in IP protection for trained models. Commenters did not provide concrete proposals on how any newly created IP rights should function, and many called on the USPTO to further consult the public on the issue. Commenters also stressed the need for examiner technical training and a call for memorializing guidance specific to AI for patent examiners.

Finally, in response to a question about whether policies and practices of other global patent agencies should inform the USPTO's approach, there was a divide between commentators advocating for an evolution of global laws in a common direction, and those who cautioned against further attempts to harmonize international patent laws and procedures "because U.S. patent law is the gold standard."[40]

We will continue to monitor developments in this space and report on any action USPTO may take in response to these comments.

IV. AUTONOMOUS VEHICLES

A. SELF-DRIVE Act Reintroduced in U.S. Congress

Federal regulation of autonomous vehicles had so far faltered in the new Congress, leaving the U.S. without a federal regulatory framework while the development of autonomous vehicle technology continues apace. However, on September 23, 2020, Rep. Bob Latta (R-OH) reintroduced the Safely Ensuring Lives Future Deployment and Research In Vehicle Evolution ("SELF DRIVE") Act.[41] As we have addressed in previous legal updates,[42] the House previously passed the SELF DRIVE Act (H.R. 3388) by voice vote in September 2017, but its companion bill (the American Vision for Safer Transportation through Advancement of Revolutionary Technologies ("AV START") Act (S. 1885)) stalled in the Senate.

The bill empowers the National Highway Traffic Safety Administration ("NHTSA") with the oversight of manufacturers of Highly Automated Vehicles ("HAVs") through enactment of

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future rules and regulations that will set the standards for safety and govern areas of privacy and cybersecurity relating to such vehicles. The bill also requires vehicle manufacturers to inform consumers of the capabilities and limitations of a vehicle's driving automation system and directs the Secretary of Transportation to issue updated or new motor vehicle safety standards relating to HAVs.

One key aspect of the bill is broad preemption of the states from enacting legislation that would conflict with the Act's provisions or the rules and regulations promulgated under the authority of the bill by the NHTSA. While state authorities would likely retain their ability to oversee areas involving human driver and autonomous vehicle operation, the bill contemplates that the NHTSA would oversee manufacturers of autonomous vehicles, just as it has with non-autonomous vehicles, to ensure overall safety. In addition, the NHTSA is required to create a Highly Automated Vehicle Advisory Council to study and report on the performance and progress of HAVs. This new council is to include members from a wide range of constituencies, including members of the industry, consumer advocates, researchers, and state and local authorities. The intention is to have a single body (the NHTSA) develop a consistent set of rules and regulations for manufacturers, rather than continuing to allow the states to adopt a web of potentially widely differing rules and regulations that may ultimately inhibit development and deployment of HAVs.

In a joint statement on the bill, Energy and Commerce Committee Republican Leader Rep. Greg Walden (R-OR) and Communications and Technology Subcommittee Republican Leader Rep. Bob Latta (R-OH) noted that "[t]here is a clear global race to AVs, and for the U.S. to win that race, Congress must act to create a national framework that provides developers certainty and a clear path to deployment."[43] The bill has been referred to the House Energy and Commerce Committee and awaits further action.[44]

B. European Commission Report on the Ethics of Connected and Automated Vehicles

In September 2020, the Commission published a report by an independent group of experts on the ethics of connected and automated vehicles ("CAVs").[45] The report—which promotes the "systematic inclusion of ethical considerations in the development and use of CAVs"[46]—sets out twenty ethical recommendations on road safety, privacy, fairness, AI explainability, responding to dilemma situations, clear testing guidelines and standards, the creation of a culture of responsibility for the development and deployment of CAVs, auditing CAV algorithmic decision-making reducing opacity, as well as the promotion of data, algorithm and AI literacy through public participation. The report applies a "Responsible Research and Innovation" approach that "recognises the potential of CAV technology to deliver the […] benefits [reducing the number of road fatalities and harmful emissions from transport, improving the accessibility of mobility services]" but also incorporates a broader set of ethical, legal and societal considerations into the development, deployment and use of CAVs and to achieve an "inherently safe design" based on a user-centric perspective.[47] The report builds on the Commission's strategy on Connected and Automated Mobility.[48]

C. Proposed German Legislation on Autonomous Driving

The German government intends to pass a law on autonomous vehicles ("Gesetz zum autonomen Fahren") by mid-2021.[49] The new law is intended to regulate the deployment of CAVs in specific operational areas by the year 2022 (including Level 5 "fully automated vehicles"), and will define the obligations of CAV operators, technical standards and testing, data handling, and liability for operators. The proposed law is described as a temporary legal instrument pending agreement on harmonized international regulations and standards.

Moreover, the German government also intends to create, by the end of 2021, a "mobility data room" ("Datenraum Mobilität"), described as a cloud storage space for pooling mobility data coming from the car industry, rail and local transport companies, and private

mobility providers such as car sharers or bike rental companies.[50] The idea is for these industries to share their data for the common purpose of creating more efficient passenger and freight traffic routes, and support the development of autonomous driving initiatives in Germany.

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[1]   United States Patent and Trademark Office, *Public Views on Artificial Intelligence and Intellectual Property Policy* (Oct. 2020), at 2 (summarizing responses by stakeholders to the USPTO's request for public comment), *available at* https://www.uspto.gov/sites/default/files/documents/USPTO_AI-Report_2020-10-07.pdf.

[2]   H. Mark Lyon, *Gearing Up For The EU's Next Regulatory Push: AI*, LA & SF Daily Journal (Oct. 11, 2019), *available at* https://www.gibsondunn.com/wp-content/uploads/2019/10/Lyon-Gearing-up-for-the-EUs-next-regulatory-push-AI-Daily-Journal-10-11-2019.pdf.

[3]   EC, *White Paper on Artificial Intelligence – A European approach to excellence and trust*, COM(2020) 65 (Feb. 19, 2020), *available at* https://ec.europa.eu/info/sites/info/files/commission-white-paper-artificial-intelligence-feb2020_en.pdf.

[4]   *Id.* Industries in critical sectors include healthcare, transport, police, recruitment, and the legal system, while technologies of critical use include such technologies with a risk of death, damage or injury, or with legal ramifications.

[5]   EC, *A European strategy for data*, COM (2020) 66 (Feb. 19, 2020), *available at* https://ec.europa.eu/info/files/communication-european-strategy-data_en.

[6]   EC, *Report on the safety and liability implications of Artificial Intelligence, the Internet of Things and robotics*, COM (2020) 64 (Feb. 19, 2020), *available at* https://ec.europa.eu/info/files/commission-report-safety-and-liability-implications-ai-internet-things-and-robotics_en.

[7]   EC, *White Paper on Artificial Intelligence: Public consultation towards a European approach for excellence and trust*, COM (2020) (July 17, 2020), *available at* https://ec.europa.eu/digital-single-market/en/news/white-paper-artificial-intelligence-public-consultation-towards-european-approach-excellence.

[8]   EC, *Artificial intelligence – ethical and legal requirements,* COM (2020) (June 2020), *available at* https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12527-Requirements-for-Artificial-Intelligence.

[9]   *Id.*

[10]   European Parliament, *Setting up a special committee on artificial intelligence in a digital age, and defining its responsibilities, numerical strength and term of office* (June 18, 2020), *available at* https://www.europarl.europa.eu/doceo/document/TA-9-2020-0162_EN.html; the European Parliament is also working on a number of other issues related to AI, including: the civil and military use of AI (legal affairs committee); AI in education, culture and the audio-visual sector (culture and education committee); and the use of AI in criminal law (civil liberties committee).

[11]   European Parliament, News Report, *AI rules: what the European Parliament wants* (Oct. 21, 2020), *available at* https://www.europarl.europa.eu/news/en/headlines/society/20201015STO89417/ai-rules-what-the-european-parliament-wants.

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[12]   European Parliament, *Parliament leads the way on first set of EU rules for Artificial Intelligence* (Oct. 20, 2020), *available at* https://www.europarl.europa.eu/news/en/press-room/20201016IPR89544/.

[13]   In addition, the Parliament announced that it had approved two separate legislative initiative reports calling on the Commission to address and tackle current shortcomings in the online environment in its Digital Services Act ("DSA") package, due to be presented in December 2020. In particular, the Parliament noted that the EU aims to shape the digital economy at the EU level, as well as set the standards for the rest of the world. In addition, the Parliament outlined in its reports that all digital service providers established in non-EU must adhere to the DSA's rules when their services are also aimed at consumers or users in the EU.

[14]   European Parliament, *Report with recommendations to the Commission on a framework of ethical aspects of artificial intelligence, robotics and related technologies* (2020/2012 (INL)) (Oct. 8, 2020), *available at* https://www.europarl.europa.eu/doceo/document/A-9-2020-0186_EN.pdf; European Parliament, *Resolution of 20 October 2020 with recommendations to the Commission on a framework of ethical aspects of artificial intelligence, robotics and related technologies* (2020/2012 (INL)) (Oct. 20, 2020), *available at* https://www.europarl.europa.eu/doceo/document/TA-9-2020-0275_EN.pdf.

[15]   Press Release, European Parliament, *Parliament leads the way on first set of EU rules for Artificial Intelligence* (Oct. 20, 2020), *available at* https://www.europarl.europa.eu/news/en/press-room/20201016IPR89544/.

[16]   *Id.*

[17]   Press Release, European Parliament, *Parliament leads the way on first set of EU rules for Artificial Intelligence* (Oct. 20, 2020), *available at* https://www.europarl.europa.eu/news/en/press-room/20201016IPR89544/.

[18]   European Parliament, *Report with recommendations to the Commission on a civil liability regime for artificial intelligence* (2020/2014 (INL)) (Oct. 5, 2020), available at https://www.europarl.europa.eu/doceo/document/A-9-2020-0178_EN.pdf; European Parliament, *Resolution of 20 October 2020 with recommendations to the Commission on a civil liability regime for artificial intelligence* (2020/2014 (INL)), *available at* https://www.europarl.europa.eu/doceo/document/TA-9-2020-0276_EN.pdf.

[19]   European Parliament, *Report on intellectual property rights for the development of artificial intelligence technologies* (2020/2015(INI)) (Oct. 2, 2020), *available at* https://www.europarl.europa.eu/doceo/document/A-9-2020-0176_EN.pdf; European Parliament, *Resolution of 20 October 2020 on intellectual property rights for the development of artificial intelligence technologies* (2020/2015(INI)) (Oct. 20, 2020), *available at* https://www.europarl.europa.eu/doceo/document/TA-9-2020-0277_EN.pdf.

[20]   *Innovative And Trustworthy AI: Two Sides Of The Same Coin*, Position paper on behalf of Denmark, Belgium, the Czech Republic, Finland, France, Estonia, Ireland, Latvia, Luxembourg, the Netherlands, Poland, Portugal, Spain and Sweden*, available at* https://em.dk/media/13914/non-paper-innovative-and-trustworthy-ai-two-side-of-the-same-coin.pdf; *see also* https://www.euractiv.com/section/digital/news/eu-nations-call-for-soft-law-solutions-in-future-artificial-intelligence-regulation/.

[21]   Stellungnahme der Bundesregierung der Bundesrepublik Deutschland zum Weißbuch zur Künstlichen Intelligenz – ein europäisches Konzept für Exzellenz und Vertrauen, COM (2020) 65 (June 29, 2020), *available at* https://www.ki-strategie-deutschland.de/files/downloads/Stellungnahme_BReg_Weissbuch_KI.pdf; *see also* Philip

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Grüll, *Germany calls for tightened AI regulation at EU level*, Euractiv (July 1, 2020), *available at*
https://www.euractiv.com/section/digital/news/germany-calls-for-tightened-ai-regulation-at-eu-level/.

[22]   Deutscher Bundestag, Enquete-Kommission, Künstliche Intelligenz – Gesellschaftliche Verantwortung und wirtschaftliche, soziale und ökologische Potenziale, *Kurzzusammenfassung des Gesamtberichts* (Oct. 28, 2020), *available at* https://www.bundestag.de/resource/blob/801584/102b397cc9dec49b5c32069697f3b1e3/Kurzfassung-des-Gesamtberichts-data.pdf.

[23]   UK ICO, *Guidance on AI and data protection* (July 30, 2020), *available at* https://ico.org.uk/for-organisations/guide-to-data-protection/key-data-protection-themes/guidance-on-ai-and-data-protection/.

[24]   Examples of such privacy-enhancing techniques include perturbation or adding 'noise', synthetic data, and federated learning.

[25]   On the topic of data minimization, *see further* the European Data Protection Board's ("EDPB") Draft Guidelines on the Principles of Data Protection by Design and Default under Article 25 of the GDPR, adopted on October 20, 2020 after a public consultation and *available* here.

[26]   H.R. 2575, 116th Congress (2019-2020).

[27]   The Ripon Advance, *GOP senators praise House passage of AI in Government Act* (Sept. 16, 2020), *available at* https://riponadvance.com/stories/gop-senators-praise-house-passage-of-ai-in-government-act/?_sm_au_=iVV6kKLFkrjvZrvNFcVTvKQkcK8MG; Rob Portman, *House Passes Portman, Gardner Bipartisan Legislation to Improve Federal Government's Use of Artificial Intelligence* (Sept. 14, 2020), *available at* https://www.portman.senate.gov/newsroom/press-releases/house-passes-portman-gardner-bipartisan-legislation-improve-federal?_sm_au_=iVV6kKLFkrjvZrvNFcVTvKQkcK8MG.

[28]   Robin Kelly, *Kelly, Hurd Introduce Bipartisan Resolution to Create National Artificial Intelligence Strategy* (Sept. 16, 2020), *available at* https://robinkelly.house.gov/media-center/press-releases/kelly-hurd-introduce-bipartisan-resolution-to-create-national-artificial?_sm_au_=iVV6kKLFkrjvZrvNFcVTvKQkcK8MG; H.Con.Res. 116, 116th Congress (2019-2020).

[29]   Bipartisan Policy Center, *A National AI Strategy* (Sept. 1, 2020), *available at* https://bpcaction.org/wp-content/uploads/2020/09/1-Pager-on-National-AI-Strategy-Resolution-.pdf?_sm_au_=iVV6kKLFkrjvZrvNFcVTvKQkcK8MG.

[30]   On September 10, the House Budget Committee held a hearing to discuss the impact of Artificial Intelligence on the U.S. economy, and specifically on what role technology should play in the country's recovery post-COVID-19. Witness Darrell West, Ph.D., of Brookings Institution warned that the rapid integration of AI technologies developed in the private sector could affect the American workforce by causing job losses and job dislocation.

[31]   H.R. 8390, 116th Congress (2019-2020).

[32]   Paul D. Tonko, Tonko, *Reschenthaler Introduce Artificial Intelligence Education Act* (Sept. 24, 2020), *available at* https://tonko.house.gov/news/documentsingle.aspx?DocumentID=3142.

[33]   United States Patent and Trademark Office, *USPTO releases report on artificial intelligence and intellectual property policy* (Oct. 6, 2020), *available at*

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https://www.uspto.gov/about-us/news-updates/uspto-releases-report-artificial-intelligence-and-intellectual-property?_sm_au_=iVV6kKLFkrjvZrvNFcVTvKQkcK8MG.

[34]   United States Patent and Trademark Office, Public Views on Artificial Intelligence and Intellectual Property Policy (Oct. 2020), *available at* https://www.uspto.gov/sites/default/files/documents/USPTO_AI-Report_2020-10-07.pdf. On October 30, 2019, the USPTO also issued a request for comments on Intellectual Property Protection for Artificial Intelligence Innovation, on IP policy areas other than patent law. The October 2020 USPTO publication summarizes the responses by commentators at Part II from p. 19 of the Report onwards.

[35]   *Id.* at ii.

[36]   *Id.* at 5.

[37]   *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 221 (2014); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66 (2012).

[38]   *In re Wands* 858 F.2d 731 (Fed. Cir. 1988).

[39]   *Supra,* n.34, at 15.

[40]   *Id.* at 18.

[41]   H.R. __ 116th Congress (2019-2020).

[42]   For more information, please see our legal updates Accelerating Progress Toward a Long-Awaited Federal Regulatory Framework for Autonomous Vehicles in the United States and 2019 Artificial Intelligence and Automated Systems Annual Legal Review.

[43]   Energy & Commerce Committee Republicans, Press Release, *E&C Republicans Continue Leadership on Autonomous Vehicles* (Sept. 23, 2020), *available at* https://republicans-energycommerce.house.gov/news/press-release/ec-republicans-continue-leadership-on-autonomous-vehicles/.

[44] State regulatory activity has continued to accelerate, adding to the already complex mix of regulations that apply to companies manufacturing and testing HAVs. Over half of all U.S. states have enacted legislation related to autonomous vehicles; *see further Nathan Benaich & Ian Hogarth*, State of AI Report (Oct. 1, 2020), at 93, *available at* https://docs.google.com/presentation/d/1ZUimafgXCBSLsgbacd6-a-dqO7yLyzll1ZJbiCBUUT4/edit#slide=id.g893233b74e_0_0; National Conference of State Legislatures, *Autonomous Vehicles: Self-Driving Vehicles Enacted Legislation* (Feb. 18, 2020), *available at* https://www.ncsl.org/research/transportation/autonomous-vehicles-self-driving-vehicles-enacted-legislation.aspx. As outlined in our 2019 Artificial Intelligence and Automated Systems Annual Legal Review, state regulations vary significantly. Also, in November 2020, Massachusetts voters are deciding on whether or not to add "mechanical" vehicle telematics data—real-time updates from a car's sensors transmitted to an automaker's private servers—to the list of information that Original Equipment Manufacturers ("OEMs") have to share with independent mechanics under the state's landmark "Right to Repair" law. Telematics data was purposefully excluded from the original 2013 law. If passed, the amendment would require automakers who want to do business in the state to make that data accessible through a smartphone app for owners starting in 2022. *See* Rob Stumpf, *There's Another Huge Right to Repair Fight Brewing in Massachusetts*, The Drive (Oct. 13, 2020), *available at* https://www.thedrive.com/news/36980/theres-another-huge-right-to-repair-fight-brewing-in-massachusetts.

[45]   European Commission, Press Release, *New recommendations for a safe and ethical*

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transition towards driverless mobility, COM (2020) (Sept. 18, 2020), *available at* https://ec.europa.eu/info/news/new-recommendations-for-a-safe-and-ethical-transition-towards-driverless-mobility-2020-sep-18_en.

[46]   *Id.*

[47]   European Commission, Directorate-General for Research and Innovation, Independent Expert Report, *Ethics of Connected and Automated Vehicles: Recommendations on road safety, privacy, fairness, explainability, and responsibility* (Sept. 18, 2020), at 4, *available* here.

[48]   EC, *Connected and automated mobility in Europe*, COM(2020) (June 22, 2020), *available at* https://ec.europa.eu/digital-single-market/en/connected-and-automated-mobility-europe.

[49]   Bundesministerium für Verkehr und digitabe Infrastruktur, Gesetz zum autonomen Fahren (Oct. 2020), *available at* https://www.bmvi.de/SharedDocs/DE/Artikel/DG/gesetz-zum-autonomen-fahren.html; *see also* Josef Erl, *Autonomes Fahren: Deutschland soll Weltspitze werden*, Mixed.de (Oct. 31, 2020), *available at* https://mixed.de/autonomes-fahren-deutschland-soll-weltspitze-werden/.

[50]   Daniel Delhaes, *Deutsche Autoindustrie erwägt, ihre Datenschätze zu bündeln*, Handelsblatt (July 9, 2020), *available at* https://www.handelsblatt.com/technik/sicherheit-im-netz/autonomes-fahren-deutsche-autoindustrie-erwaegt-ihre-datenschaetze-zu-buendeln/26164062.html?ticket=ST-2824809-tuIGjXYQywf7MHzRurpa-ap4.

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