

The Patent Lawyer

GLOBAL REACH, LOCAL KNOWLEDGE

www.patentlawyermagazine.com

September /
October 2022



Discussion on Chinese service invention-creation and rights ownership thereof

Zhongling HAN and Xiaodong WANG of Beijing Sanyou Intellectual Property Agency Ltd. offer advice for determining an “Employer-First” and “Employee-First” dual model as a solution for invention-creation ownership.

An interview with GE

Page 12



New Canadian rules


Page 16



Adaption of the description

Page 21





Jurisdictional Briefing, US: subject matter eligibility no longer just for software and biotechnology practitioners

Dave S. Christensen and Maggie Russell of Cantor Colburn review the changes for subject matter eligibility as a result of the *American Axle & Mfg. v. Neapco Holdings LLC* case.

For a number of years, subject matter eligibility rejections have been a thorn in the side of patent practitioners in the software and biotechnology arts. When the US Supreme Court denied cert in *American Axle & Mfg. v. Neapco Holdings LLC*, the lives of drafters of mechanical patents became much harder.

While it has long been held that Congress intended patentable subject matter to “include anything under the sun made by man,”¹ in order to obtain such a patent, the invention must have subject matter eligibility, as specified by §101 and analyzed through the *Alice/Mayo* framework.² Under the *Alice/Mayo* framework, there are three judicially recognized exceptions, including: laws of nature, natural phenomenon, and abstract ideas.³ It has been reasoned such exceptions “are basic tools of scientific and technological work” and monopolizing these tools would deter innovation.⁴ An invention is determined to be patent eligible either because it is not directed towards an exception or the claimed invention as a whole includes aspects that amount to “significantly more than the exception.”⁵

The invention at issue in *American Axle* relates to a method for reducing vibration in vehicle driveshafts through the application of a liner, which was “tuned” to the mass and stiffness and designed to attenuate the vibrations in response to varying frequencies.⁶ During litigation Neapco’s



Dave S. Christensen



Maggie Russell

expert stated, “the phrase ‘tuning a mass and a stiffness of at least one liner’ claims Hooke’s law.” Further, one of the named inventors and American Axle’s engineering manager admitted mass and stiffness are directly implicated.⁷

In the case of *American Axle*, what may have originally been an indefiniteness issue (would one of ordinary skill have known how to “tune” a liner) turned into a subject matter eligibility debate. Both the District Court and the Court of Appeals for the Federal Circuit (CAFC) determined the claims were directed towards a law of nature, specifically Hooke’s Law, as a way of achieving the desired result without any aspects that amount to significantly more.⁸ The CAFC elaborated “...the claims’ instruction to tune a liner essentially amounts to the sort of directive prohibited by the Supreme Court in *Mayo* – i.e. “simply stat[ing] a law of nature while adding the words ‘apply it.’”⁹

For those interested in claiming a mechanical invention that utilizes a law of nature, a way to avoid such an issue comes in changes to both the specification and the claims. Ensuring the claims are written to include specific mechanisms, physical structures, or steps that utilizes a law of nature, can demonstrate the invention amounts to more than the judicial exception. There have been a number of recent decisions citing *American Axle* that elaborate on the importance of including such claim language.¹⁰

If such language is not used, the specification can be used to elaborate on the language used in the claim, such as providing examples or alternative methods for carrying out a step. Often in litigation, clarity and indefiniteness issues can be overcome through the use of experts; however, as seen here, such a strategy may create a fatal §101 issue when the only method of carrying out a claimed element is through a law of nature. The court employed the suggested use provided by the patentee's expert to demonstrate the claims lacked descriptions of the mechanism.¹¹ In order to appropriately patent mechanical inventions that utilize a law of nature, the claims and the specification should enable the application to overcome potential subject matter eligibility issues.

Contact

Cantor Colburn LLP

20 Church Street, 22nd Floor, Hartford, CT 06103-3207 US

Tel: +1 860-286-2929

www.cantorcolburn.com

Résumés

Dave S. Christensen, Partner

Dave co-chairs the firm's Mechanical Engineering Patent Practice Group and chairs the Additive Manufacturing Practice Group, leading teams dedicated to responsive, client-focused services. He focuses his practice on assisting clients in using patents and trade secrets to protect their products in both US and foreign jurisdictions in a variety of technical fields, including consumer products, electrical power distribution and transmission, renewable energy, and optical measurement systems. A significant part of his practice includes assisting clients in developing cost-effective strategies for managing risk and building their brand in new product development, and in building and managing their intellectual property portfolios.

Maggie Russell, Associate

Maggie focuses her practice on drafting and prosecuting patent applications for chemical and material science technologies. Maggie has experience in a wide range of fields including chemistry, chemical engineering, semiconductor devices, mechanical engineering, and material science. Prior to joining Cantor Colburn, she worked as a semiconductor engineer at BAE Systems and authored multiple publications in the *Journal of the Electrochemical Society*.



¹ See *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980) (noting that congress intended patentable subject matter "to include anything under the sun that is made by man," indicating the intention to cover a large amount of subject matter limited only by what is man-made).

² See 35 U.S.C §101.

³ See 35 U.S.C §101. See also *Mayo Collaborative Services v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012) (detailing how judicial exceptions include laws of nature, abstract ideas, and natural phenomena). See also *Alice Corp. Pty. Ltd v. CLS Bank Int'l*, 573 U.S. 208, 217-18.

⁴ See *Mayo*, *supra* note 3, at 71.

⁵ See generally MPEP §2106 (9th ed. Rev. 8, Aug. 2017). See also *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016).

⁶ See *Am. Axle & Mfg. v. Neapco Holdings LLC*, 967 F.3d 1285, 1289-1293.

⁷ See *Id.* at 1294 "For example, Neapco's expert, Dr. Becker, stated that "the phrase 'tuning a mass and a stiffness of at least one liner' claims Hooke's law." J.A. 1604.", "AAM's engineering manager likewise admitted that "if [one] does something to control the stiffness [or mass]" of a liner—the variables directly implicated by Hooke's law—that person is "directly controlling tuning." J.A. 2547 (20:23-21:1)".

⁸ See *Id.*; See also *Id.* at 1304.

⁹ See *American Axle & Mfg. v. Neapco Holdings LLC*, 939 F.3d 1355, 1362 (Fed. Cir. 2019).

¹⁰ See *Barry v. SeaSpine Holdings Corp.*, 2022 U.S. Dist. LEXIS 14060; See Also *Xodus Med., Inc. v. Prime Med., LLC*, 2021 U.S. Dist. LEXIS 244222; See Also *Northwestern Univ. v. Kuka AG*, 2021 U.S. Dist. LEXIS 194914.

¹¹ See *Am. Axle & Mfg. v. Neapco Holdings LLC*, 967 F.3d 1285, 1362.