



*Defend Trade Secrets Act,
Updated Judicial Decisions,
and U.S. Supreme Court
Intellectual Property Cases
for the 2020-2021 Term*



Copyright © 2021

Printed in the United States of America. All rights reserved. No part of this monograph may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, except for citation within legal documents filed with a tribunal, without permission in writing from the publisher.

Disclaimer: The views expressed herein are not a legal opinion. Every fact situation is different and the reader is encouraged to seek legal advice for their particular situation.

The Apex Jurist, www.ApexJurist.com is
Published by ApexCLE, Inc.
www.ApexCLE.com

119 South Emerson St., # 248
Mount Prospect, Illinois 60056

Ordering Information:

Copies of this monograph may be ordered directly from the publisher for \$64.95 plus \$4.25 shipping and handling. Please enclose your check or money order and shipping information. For educational, government or multiple copy pricing, please contact the publisher.

Library of Congress Cataloging-in-Publication Data

ApexCLE, Inc.

1. ApexCLE, Inc. 2. Law-United States – Guide-books.
3. Legal Guide 4. Legal Education.

About the Presenter

ADRIENNE B. NAUMANN

Adrienne B. Naumann established her own practice in 1996 which is exclusively intellectual property law. Ms. Naumann's practice includes individual entrepreneurs and start-up companies, as well as small and medium sized businesses. Her issued patents include a broad range of technologies including: a razor handle, board game, agricultural method, pneumatically driven trench shoring device, floral containers, electromechanical lock, laminar flow nozzle, portable exercise devices, mechanical bag holder and shelving. She has also filed successful patent application appeals in the Patent & Trademark Office on behalf of clients.

Ms. Naumann has obtained trademarks, copyrights and design patents on behalf of artists, writers and companies. In addition to obtaining intellectual property protection through government agencies, Ms. Naumann advises and drafts documents on matters of ownership, shop rights, work for hire, transfers of rights, licenses, permissions, rescission, consents, non-disclosure agreements, releases, trade secrets, proprietary information and web sites.

Ms. Naumann judges the Illinois Institute of Technology Interprofessional Projects Program in Chicago. Ms. Naumann also serves on the Board of the University of Chicago, Chicago Women's Alliance and on the e-Discovery committee for the Seventh Circuit Court of Appeals

Email Address: adriennebnaumann@uchicago.edu

Website: <http://home.comcast.net/~adrienne.b.naumann/IP>

Mailing Address: 8210 Tripp Avenue, Skokie, IL 60076

Phone Number: (847) 329-8185

Table of Contents

Title Page	1
Sponsor Page	2
Presenter Page	3
Table of Contents	4-5
Course Description	6
Course Presentation	6
Course Material	6
Course Learning Objectives and Outcomes	7
Timed Agenda:	8-10
Course Material	11-31
Introduction:	11-12
Naturally occurring events/laws of nature	12-14
Illumina, Inc. et al. v. Ariosa Diagnostics, Inc. et al., 952 F.3d 1367 (Fed. Cir. 2020), petition for cert. dismissed May 21, 2021.	12
Boehringer Ingelheim Pharmaceuticals et al. v. Mylan Pharmaceuticals Inc., et al, 803 Fed. Appx. 397 (Fed. Cir. 2020) (non-precedential)	12-13
American Axle & Manufacturing, Inc. v. Neapco Holdings LLC et al., 967 F.3d 1285 (Fed. Cir. 2019) petition for cert. filed Dec. 28, 2020.	13-14
Abstract ideas	14-29
Tenstreet LLC v. Driver Reach LLC, 826 Fed. Appx 925 (Fed. Cir. 2020) (non-precedential)	14
Adaptive Streaming Inc. v. Netflix, Inc., 2020 U.S. App. Lexis 39077 (Fed Cir. December 14, 2020) (Non-precedential)	15
Salwan v. Iancu, 825 Fed. Appx. 862 (Fed. Cir. 2020) (non-precedential)	15-16
In re Rosenberg, 813 Fed. Appx 594 (Fed. Cir. 2020) (non-precedential)	16
Electronic Communication Technologies, LLC v. ShoppersChoice.com, LLC, 958 F.3d 1178 (Fed. Cir. 2020)	16-17

Eco-Services, LLC. V. Certified Aviation Services, LLC, 2020 U.S. App. Lexis 31982 (Fed. Cir. October 8, 2020)	17
Simio, LLC. v. FlexSim Software Products Inc., 983 F.3d 1353 (Fed. Cir. 2020)	17-18
In re Morsa, 809 Fed. Appx. 913 (Fed. Cir. 2020)(non-precedential)	18-19
Free Stream Media Corporation v. Alphonso Inc., 2021 App. Lexis 13837(Fed. Cir. May 11, 2021)	19
TecSec, Inc. v. Adobe, Inc. et al., 978 F.3d 1278 (Fed. Cir. 2020)	19-20
Gree, Inc. v. Supercell Oy, 835 Fed. Appx. 583 (Fed. Cir. 2020)(non-precedential appeal of a post-grant review)	20-21
Ubisoft Entertainment, S.A. et al. v. Yousician Oy, 814 Fed. Appx. 558 (Fed. Cir. June 11, 2020)(non-precedential)	21
Packet Intelligence LLC v. NetScout System, LLC et al., 965 F.3d 1299 (Fed. Cir. 2020)	21-22
NetSoc LLC v. Match Group LLC et. al, 838 Fed. Appx. 544 (Fed. Cir. 2020)	22
In re Jobin, 811 Fed. Appx. 633 (Fed. Cir. 2020) (non-precedential)	22-23
cxLoyalty, Inc. v. Maritz Holdings, Inc., 986 F.3d 1367 (Fed. Cir. 2021)	23
Electronic Communications Technologies, LLC v. ShoppersChoice.com, LLC, 958 F.3d 1178 (Fed. Cir. 2020)	24
Customedia Technologies v. Dish Network Corp. et al., 951 F.3d 1359 (Fed. Cir. 2020)(covered business method review)	24-25
Enco Systems v. DaVincia, 845 Fed. Appx. 953(Fed. Cir. 2021)	25
In re Board of Trustees of the Leland Stanford Junior University, 989 F.3d 1367 (Fed. Cir. 2021)	26
In re Board of Trustees of the Leland Stanford Junior University, 991 F.3d 1245 (Fed. Cir. 2021)	26-27
CardioNet LLC et al. v. InfoBionic, 955 F.3d 1358 (Fed. Cir. 2020), cert. denied 141 S. Ct. 1266 (2021)	27
Boom!Payments, Inc. v. Stripe Inc., 839 Fed. Appx. 528(Fed. Cir. 2021)(non-precedential)	28
XY, LLC. et al v. TransOva Genetics LC, 968 F.3d 1323 (Fed. Cir. 2020)	28-29
Whitserve LLC v. Dropbox, Inc., 2021 U.S. App. Lexis 12285 (April 26, 2021) (non-precedential)	29

The meaning of these decisions? 29-30

Resources 31

Resources Specific to this Course	31
Resources for the Legal Professional	31

Course Description

Course Presentation

This course will address recent Federal Circuit decisions addressing patent eligible subject matter under 35 U.S.C. section 101, and I continue to update the decisions. In particular the categories include: computerized abstract ideas; medical innovations and natural law; mechanized inventions and natural law. I will also address whether one can predict whether a patent application or patent will survive an assertion of ineligible subject matter.

This course provides an intellectual foundation and introduces a set of learning skills essential for success in the legal profession and for life beyond. The course will provide opportunities for careful reading, for creative and critical thinking, for oral and written communication, and for engaging with others in a shared conversation about stimulating material.

Course Material

This material is intended to be a guide in general and is not legal advice. If you have any specific question regarding the state of the law in any particular jurisdiction, we recommend that you seek legal guidance relating to your particular fact situation.

The course materials will provide the attendee with the knowledge and tools necessary to identify the current legal trends with respect to these issues. The course materials are designed to provide the attendee with current law, impending issues and future trends that can be applied in practical situations.

Course Learning Objectives and Outcomes

After this course, the Participant will understand the duties, roles and responsibilities of counsel in situations involving patent ineligibility under 35 U.S.C. section 101.

After this course, the Participant will learn the following practice tips on how to avoid a conclusion of patent/patent application ineligibility under section 101 in an IPR, litigation or patent application prosecution

After this course, the Participant will develop an understanding about how to avoid drafting a U.S. utility patent application that is vulnerable to a section 101 ineligibility assertion.

Practical Skills Gained - Please identify any practical skills gained by the Participant

This knowledge of patent ineligible subject matter under section 101 would assist participants in taking a deposition, arguing in court, or writing a brief, but first and foremost, drafting U.S. utility patent applications that will survive a subject matter attack.

Upon completion of the course, participants should be able to apply the course material; improve their ability to research, plan, synthesize a variety of sources from authentic materials, draw conclusions; and demonstrate an understanding of the theme and concepts of the course by applying them in their professional lives.

Timed Agenda:

Presenter Name: Adrienne Naumann

CLE Course Title: Defend Trade Secrets Act, Updated Judicial Decisions, and U.S. Supreme Court Intellectual Property Cases for the 2020-2021 Term

Time Format (00:00:00 - Hours: Minutes: Seconds)	Description
00:00:05	ApexCLE Company Credit Introduction
00:00:21	CLE Presentation Title: Defend Trade Secrets Act, Updated Judicial Decisions, and U.S. Supreme Court Intellectual Property Cases for the 2020-2021 Term
00:00:32	CLE Presenter Introduction
00:00:43	CLE Substantive Material Presentation Introduction
00:00:54	J35 U.S.C section 101 Designates Patent Eligible Subject Matter in the United States in 4 Categories
00:01:21	Long Standing Judicially Created Exceptions to These Statutory Categories
00:01:53	Not All Innovations are Patent Eligible Subject Matter
00:03:30	Today We Will Review Recent Decisions from the U. S. Court of Appeals for the Federal Circuit [hereinafter Federal Circuit] 2020-2021 Which Resolves Patent Eligible Subject Matter
00:04:27	Naturally Occurring Events/Laws of Nature
00:05:01	Illumina, Inc. et al. v. Ariosa Diagnostics, Inc. et al., 952 F.3d 1367 (Fed. Cir. 2020), petition for cert. dismissed May 21, 2021)
00:08:25	Boehringer Ingelheim Pharmaceuticals et al. v. Mylan Pharmaceuticals Inc., et al, 803 Fed. Appx. 397(Fed. Cir. 2020) (non-precedential)
00:10:54	American Axle & Manufacturing, Inc. v. Neace Holdings LLC et al., 967 F.3d 1285(Fed. Cir. 2019) petition for cert. filed Dec. 28, 2020
00:16:24	Abstract Ideas
00:16:57	Tenstreet LLC v. Driver Reach LLC
00:19:36	Adaptive Streaming Inc. v. Netflix, Inc.

00:22:45	Salwan v. Iancu
00:26:20	In re Rosenberg
00:28:38	Electronic Communication Technologies v. ShoppersChoice.com
00:30:54	Eco-Services, LLC. v. Certified Aviation Services, LLC
00:32:33	Simio, LLC v. FlexSim Software Products Inc.
00:34:57	In re Morsa
00:37:25	Free Stream Media Corporation v. Alphonso, Inc.
00:39:25	TecSec, Inc. v. Adobe, Inc. et al.
00:41:54	Gree, Inc. v. Supercell Oy
00:44:23	Ubisoft Entertainment v. Yousician Oy
00:46:42	Packet Intelligence LLC v. NetScout System LLC et al.
00:48:36	NetSoc LLC v. Match Group LLC et al.
00:51:00	In re Jobin
00:52:47	cxLoyalty, Inc v. Maritz Holdings, Inc.
00:55:16	Electronic Communications Technologies, LL v. ShoppersChoic.com LLC
00:59:50	Customedia Technologies v. Dish Network Corp. ET AL.
01:01:48	Enco Systems v. DaVincia
01:04:03	In re Board of Trustee of the Leland Stanford Junior University
01:04:14	In re Board of Trustee of the Leland Stanford Junior University 989 F.3d 1367 (Fed. Cir. 2021)
01:07:42	In re Board of Trustee of the Leland Stanford Junior University 991 F.3d 1245 (Fed. Cir. 2021)
01:10:06	CardioNet LLC et al. v. InfoBionic
01:14:35	Boom!Payment Inc. v. Stripe Inc.
01:16:53	XY LLC. et al. v. TransOva Genetics LC
01:19:33	Whitserve LLC v. DropBox Inc.
01:22:40	The Meaning of These Decisions
01:22:52	The good news: The majority of decisions addressing subject matter comprising computers disclose a pattern
01:24:50	Biomedical inventions: Is a process diagnostic, treatment, or a laboratory method and/or device?

01:26:11	For subject matter which is potentially patent eligible: Draft the specification and claims very carefully
01:27:35	The not so good news: There appears to be less of a pattern when determining to which extent a specification should 'bolster' a claim.
01:28:33	Hopefully the Supreme Court will review <u>American Axle & Manufacturing, Inc.</u> to resolve
01:30:15	Presenter Closing
01:30:21	ApexCLE Company Closing Credits
01:37:27	End of Video

Course Material

I. Introduction:

- A. 35 U.S.C. section 101 designates patent eligible subject matter in the United States:
 - 1. compositions of matter;
 - 2. manufactured items;
 - 3. processes/methods;
 - 4. machines, and improvements to all the above.
- B. However, there are long standing judicially created exceptions to these statutory categories:
 - 1. Abstract ideas such as, but not exclusively, mathematics;
 - 2. Naturally occurring phenomena such as lightning; and;
 - 3. Laws of nature such as the formula for gravitational forces on earth.
- C. As a result, not all innovations are patent eligible subject matter, for example
 - 1. a new method of accounting; or
 - 2. discovery of a naturally occurring ratio between the amount of sugar to the amount of proteins in a person's body.
 - 3. The current criteria for evaluating patent eligible subject matter initially appeared in Alice Corporation Pty. Ltd. v. CLS Bank International, 573 U.S. 208, 216 (2014) [hereinafter Alice] and Mayo Collaborative Services v. Prometheus Laboratories, Inc., 566 U.S. 66, 86 (2012) [hereinafter Mayo].
 - a) according to these decisions, each evaluation requires a two-step inquiry:
 - (1) is a claim as a whole directed to an abstract idea, natural phenomenon or natural law?
 - (2) If so, is there an inventive concept within the claim which transforms the abstract idea or naturally occurring event/laws into patent eligible subject matter?
- D. Today I will review recent decisions from the U. S. Court of Appeals for the Federal Circuit [hereinafter Federal Circuit] which resolves patent eligible subject matter. Most decisions we study today address computerized processes and systems, and whether

these claims for computerized processes and systems primarily address abstract ideas. However, the decisions addressing natural laws and phenomena are just as important and we will address these initially.

II. Naturally occurring events/laws of nature

A. Illumina, Inc. *et al.* v. Ariosa Diagnostics, Inc. *et al.*, 952 F.3d 1367 (Fed. Cir. 2020), petition for *cert.* dismissed May 21, 2021.

1. Outcome:

Summary judgment was reversed and remanded, because claims comprised patent eligible subject matter.

2. Background

U.S. Pat. Nos. 9,580,751 and 9,738,942 addressed a process for enriching a cell free fetal DNA sample from a pregnant woman's blood. The asserted laboratory method is based upon the discovery that naturally occurring cell free fetal DNA is generally shorter in length than cell free maternal DNA. However, the claims addressed the laboratory method and not the naturally occurring cell free DNA longitudinal lengths relationship between fetal DNA and maternal DNA.

3. Federal Circuit analysis

a) Mayo Step 1

The claims as a whole address a multi-step method for preparing enriched cell free fetal DNA from a pregnant woman's blood, and the specific sequence of laboratory techniques at designated temperatures and time intervals were not claiming the natural phenomena of differing longitudinal lengths of the DNA stands. Compare a new method for isolating a naturally occurring gene to the discovery of this naturally occurring gene so there is no need to proceed to Mayo Step 2.

B. Boehringer Ingelheim Pharmaceuticals *et al.* v. Mylan Pharmaceuticals Inc., *et al.*, 803 Fed. Appx. 397 (Fed. Cir. 2020) (non-precedential)

1. Outcome:

Dismissal pursuant to motion for judgment on the pleadings was reversed and remanded, based upon patent eligible subject matter

2. Background

U.S. Pat. No. 8,853,156 addresses treatment of type 2 diabetes

mellitus with certain biochemical inhibitors, and these inhibitors are metabolized by the liver instead of kidneys.

3. Federal Circuit analysis

a) Mayo Step 1

these claims are directed to a specific method of treatment for diabetes type 2 patients with renal impairment, with a specific biochemical inhibitor at specific doses. that these inhibitors naturally undergo liver metabolism does not result in a claim directed to that natural ability. In particular, these claims designate specific inhibitor doses as well as molecules to which inhibitors attach for maximum absorption and efficacy.

C. [American Axle & Manufacturing, Inc. v. Neapco Holdings LLC et al](#), 967 F.3d 1285 (Fed. Cir. 2019) petition for cert. filed Dec. 28, 2020.

1. Outcome:

Summary judgment based upon patent ineligible subject matter was affirmed in part and reversed in part and remanded.

2. Background

the claims of U.S. Pat. No. 7,774,911 address damping of two vibration modes simultaneously within a vehicle's prop shaft interior. The asserted invention comprises liners as part of a method for simultaneously attenuating (i.e., damping or tuning) two different vibration modes by these liners' specific structure, features and materials composition, as well as their specific positioning within the prop shaft. the district court concluded that the claims merely comprised implicit applications of Hooke's law, because Hooke's law describes the natural relationship between an object's mass, stiffness and vibration frequency for a unidirectional spring, but these claims did not designate a specific tuning method for achieving this improved damping.

D. Federal Circuit analysis

1. Mayo Step 1

The Supreme Court focuses upon claim language, and not the specification, for section 101 eligibility, and one group of claims directly yet implicitly address Hooke's law, but do not designate a specific method for applying Hooke's law, although Hooke's law also was not explicitly disclosed within the specification. Instead, the claims and specification merely describe the desired damping effect, and do not

identify the particular liners or improved method of tuning for achieving the claimed result.

2. Mayo Step 2

For one group of claims, there is no inventive concept, because the asserted invention comprises tuning a liner to damp two different vibration modes simultaneously using Hooke's law. However, another group of claims also designate positioning of the lines, and thereby may also address abstract ideas, so this group was remanded for this determination.

III. Abstract ideas

A. Tenstreet LLC v. Driver Reach LLC, 826 Fed. Appx 925 (Fed. Cir. 2020)(non-precedential)

1. Outcome:

Dismissal under F.R.C.P. 12(b)(6) was affirmed based upon patent ineligible subject matter.

2. Background

U.S. Pat. No. 8,145,575 addressed a peer-to-peer computer network to verify employment histories. The asserted improvements included a single online channel for routing electronic transmissions over the internet; the ability of job applicants to monitor the verification process; and database storage for employment histories.

3. Federal Circuit analysis

a) Alice Step 1

There was nothing beyond a generic computer network, because the method is merely an abstract idea for collecting, organizing and storing data upon a generic computer network.

b) Alice Step 2

there are no elements comprising improved computer function as a single element or an ordered combination.

B. Adaptive Streaming Inc. v. Netflix, Inc., 2020 U.S. App. Lexis 39077 (Fed Cir. December 14, 2020) (Non-precedential)

1. Outcome:

The Federal Circuit affirmed the F.R.C.P. 12 (b)(6) dismissal of claims, because they exclusively comprised patent ineligible subject matter.

2. Background

U.S. Pat. No. 7,047,305 disclosed systems that received a video signal in one format, and then broadcast this same video signal to at least one different device, but in a different electronic format.

3. Federal Circuit analysis

a) Alice Step 1

The claims are directed to the abstract idea of collecting information, and translating this information into multiple electronic formats, and without any technological advance such as software coding, decoding, compression or broadcasting techniques.

b) Alice Step 2

There is only generic computer hardware and the patent itself states "each of these blocks carries out functionality commonly known in the art,..." neither the written description/specification or claims disclosed specific unconventional coding, decoding, compression or broadcasting techniques. satisfying 35 U.S.C. sections 102 and 103 does not imply section 101 eligibility, because novel and non-obvious subject matter may nevertheless still be abstract.

C. Salwan v. Iancu, 825 Fed. Appx. 862 (Fed. Cir. 2020) (non-precedential)

1. Outcome:

Affirmed summary judgment in a 35 U.S.C. section 145 proceeding where claims were found to comprise patent ineligible subject matter

2. Background

U.S. patent application no. 12/587,101 disclosed a network system for electronic transfer of patient health and insurance information. The examiner rejected the claims under section 101, the PTAB affirmed, and the district court affirmed.

3. Federal Circuit analysis

a) Alice Step 1

The claims designate billing software for calculating a patient's

bill, and thereby comprise mere automation of organizing human activity for distributing medical information, so this is an abstract process which humans may perform.

b) Alice Step 2

A generic electronic network with conventional computer components does not transform an abstract idea into a patent eligible invention.

D. [In re Rosenberg](#), 813 Fed. Appx 594 (Fed. Cir. 2020) (non-precedential)

1. Outcome:

The Federal Circuit affirmed the PTAB's decision which affirmed the examiner's final rejection of claims under section 101

2. Background

U. S. pat. application no. 12/102,992 addressed a method and system to collect performance data related to clinical trials, analyzing this data, and reporting necessary parameter adjustments to the clinical trial. The asserted improvement was computerizing tasks which were previously performed manually.

3. Federal Circuit analysis

a) Alice Step 1

The claims describe a series of computer performed 'mental steps,' and so as a whole the claims were directed to an abstract idea of monitoring and managing a clinical trial. improved speed or efficiency over human performance is not considered an improvement to computer functionality.

b) Alice Step 2

a new abstract idea is still an abstract idea, and the claimed invention merely employs generic computer components.

E. [Electronic Communication Technologies, LLC v. ShoppersChoice.com, LLC](#), 958 F.3d 1178 (Fed. Cir. 2020)

1. Outcome:

Federal Circuit affirmed judgment on the pleadings, because the claims were not patent eligible subject matter.

2. Background

U.S. Pat. No. 9,373,261 disclosed a method for providing

electronic advance notification of pickup or delivery of a purchased item. the claims recite electronic components such as memories; processors; and computer program code.

3. Federal Circuit analysis

a) Alice Step 1

The claims are directed to the abstract idea of providing advance notification of product pick-up and delivery, which are long standing commercial practices, and implementing them with conventional computer program code.

b) Alice Step 2

The claims merely designate gathering, storing and transmitting information, and are drafted in functional terms for well understood, routine and conventional concepts.

F. [Eco-Services, LLC. V. Certified Aviation Services, LLC](#), 2020 U.S. App. Lexis 31982 (Fed. Cir. October 8, 2020)

1. Outcome:

The Federal Circuit affirmed the denial of a post-trial motion where That motion asserted that the claims did not comprise patent eligible subject matter.

2. Background

U.S. Pat. No. 9,162, 262 disclosed computerized systems and methods for controlling jet engine cleaning, and thereby eliminating human error.

3. Federal Circuit analysis

a) Alice Step 1

In this instance computerization provides a technical improvement beyond mere automation of a human activity. Addition of a computerized task as a step in a process does not necessarily result in a claim directed to an abstract idea.

G. [Simio, LLC. v. FlexSim Software Products Inc.](#), 983 F.3d 1353 (Fed. Cir. 2020)

1. Outcome:

The Federal Circuit affirmed the grant of motion to dismiss based upon patent ineligible subject matter.

2. Background

U.S. Pat. No. 8,156,468 disclosed computerized object-oriented

simulations wherein persons use graphics instead of programming for an improved user computerized simulation experience.

3. Federal Circuit analysis

a) Alice Step 1

Graphics instead of programming comprises no more than an abstract idea, because the claims do not designate how the computer's functionality is affected by an improved user experience. Simio has not shown improvement to computer functionality by using a graphic interface, by merely reciting conventional components more specific than a generic computer.

b) Alice Step 2

A new abstract idea is still an abstract idea, so a generic statement in a complaint that a feature improves computer functioning is by itself only conclusory, and the court properly disregards this conclusion under these circumstances.

H. In re Morsa, 809 Fed. Appx. 913 (Fed. Cir. 2020) (non-precedential)

1. Outcome:

The Federal Circuit affirmed the PTAB's affirmance of the examiner's rejection based upon patent ineligible subject matter.

2. Background

U.S. pat. application no. 13/694,192 was entitled "Match engine marketing which relates to matching advertisers with entities through computer networks." advertisers target online the most interested consumers and businesses, and a fee attaches for an advertiser's listing in a matched result list generated with advertiser selected criteria for targeted potential customers.

3. Federal Circuit analysis

a) Alice Step 1

claims as a whole are directed to an abstract idea, because they designate an economic practice of organizing human activity, and although the claim recites targeted advertising and bidding, combining two abstract ideas does not result in a non-abstract idea.

b) Alice Step 2 the claims merely designate generic computer components, and there are no technical details on how advertising transforms an abstract idea into an inventive

concept abstractness, novelty and non-obviousness are separate legal and/or factual concepts.

I. [Free Stream Media Corporation v. Alphonso Inc.](#), 2021 App. Lexis 13837(Fed. Cir. May 11, 2021)

1. Outcome:

The Federal Circuit reversed the district court's denial of a motion to dismiss, because the claims did not comprise patent eligible subject matter.

2. Background

U.S. Pat. Nos. 9,026,668 and 9,386,356 disclosed targeting advertisements to a user's mobile phone based upon data from the user's television, and by bypassing the security device(sandbox) which protects the user's mobile phone from the television. the network device collects program and weather information as audio and video snippets which convert to primary data

3. Federal Circuit analysis

a) Alice Step 1

The claims are directed to the abstract idea of targeted advertising, and improved computer function disclosed in specification was not recited in the claims, and because these technical improvements are not part of the claims, they are disregarded under section 101 analysis.

b) Alice Step 2

The previously existing mobile security prevents internet connected devices from communicating with each other, and in this instance, there is nothing that permits communications which were previously not possible, and there are only generic features and routine functions.

J. [TecSec, Inc. v. Adobe, Inc. et al.](#), 978 F.3d 1278 (Fed. Cir. 2020)

1. Outcome:

The Federal Circuit affirmed denial of defendant's motion for summary judgement based upon the presence of patent eligible subject matter.

2. Background

U.S. patents nos. 5,369,702; 5,680,452; 5,717,755; and 5,898,781 address a method by which a digital object, such as a document or spreadsheet, is electronically secured by two features known as labels and encryption. the asserted improvement provides additional security when a document is distributed electronically to many recipients, but with varying degrees of intended disclosure, and where cryptographic keys comprise software components that manage encryption here the number of keys is reduced by labeling files, and thereby technically improving computer network security.

3. Federal Circuit analysis

a) Alice Step 1

The asserted improvement comprises file labeling combined with fewer keys, and thereby resulting in enhanced network security as an improved computer function.

K. Gree, Inc. v. Supercell Oy, 835 Fed. Appx. 583 (Fed. Circ 2020) (non-precedential appeal of a post-grant review)

1. Outcome:

The Federal Circuit affirmed the PTAB in part and reversed in part under section 101.

2. Background

U.S. Pat. No. 9,597,594 addresses a computerized game in which players compete to build a city within a virtual space (i.e., a game space). by arranging online game contents within an online game space after a player's command the asserted invention also comprises templates which define positions of game contents within a game space, and some of these game templates are mismatched, and mismatched game templates facilitate rearrangement of game contents within a game space

3. Federal Circuit analysis

a) Alice Step 1

as a whole one group of claims is directed to the abstract idea of creating and applying templates, but the generic idea of a template existed prior to the claimed invention, and this group of claims encompassed conventional online chess templates within a generic computer model

b) Alice Step 2

For the first group of claims, computer limitations are general and

only recited in functional terms. However, a second group of claims expressly specified particular procedures by which to apply templates, and so this second group was potentially patent subject matter eligible.

L. *Ubisoft Entertainment, S.A. et al. v. Yousician Oy*, 814 Fed. Appx. 558 (Fed. Cir. June 11, 2020) (non-precedential)

1. Outcome:

The Federal Circuit affirmed the grant of a motion to dismiss under section 101.

2. Background

U.S. Pat. No. 9,839,852 disclosed a computerized game that was interactive for learning to play a guitar, and a storage medium containing a computer program.

3. Federal Circuit analysis

a) Alice Step 1

There was no specific newly designed software, and instead there was a claimed abstract process described exclusively in functional terms. The claim also solely recited gathering information of a specific content and displaying these results. the specification only comprises functional terms, and without a process or machinery for achieving these functions.

b) Alice Step 2

the abstract idea exclusively applied conventional and well understood techniques. dismissal at the pleading stage was proper, because there were no specific plausible allegations with supporting facts in the complaint.

M. *Packet Intelligence LLC v. NetScout System, LLC et al.*, 965 F.3d 1299 (Fed. Cir. 2020)

1. Outcome:

The Federal Circuit affirmed the judgment in part because the claims comprised patentable eligible subject matter.

2. Background

U.S. Pat. Nos. 6,665,725, 6,839,751 and 6,954,789 address the monitoring of data packets exchanged over a computer network, where a stream of data packets between two computers comprises a connection flow, and the asserted improvement comprises packet control through network connection points, as well as unidirectional conversational flows

resulting from specific computerized activities; that detect disjointed sequences within these flows.

3. Federal Circuit analysis

a) Alice Step 1

The claims resolve a problem unique to computer networks by identifying disjointed connection flows within a computer network, and thereby creating a more useful classification of network traffic in this instance a software-based invention comprises patent eligible subject matter, because the software improves computer network performance.

N. NetSoc LLC v. Match Group LLC et. al, 838 Fed. Appx. 544 (Fed. Cir. 2020)

1. Outcome:

The district court properly granted the motion to dismiss the claims based upon patent ineligible subject matter.

2. Background

Claims from U.S. Pat. Nos. 9,218,591 and 9,978,107 designated computer systems and methods for maintaining a list of participants who communicate with selected other participants online, and where contact information of participants may be shielded from another participant using this same online communication system.

3. Federal Circuit analysis

a) Alice Step 1

These claims designate the abstract idea of automating social networks to exchange information, and where computers merely serve as generic tools. Moreover, establishing a social network is an abstract idea for organizing human activity.

b) Alice Step 2

The claims do not designate any technological improvement, and according to the patents themselves, a human resource department could perform the same task.

O. In re Jobin, 811 Fed. Appx. 633 (Fed. Cir. 2020) (non-precedential)

1. Outcome:

The Federal Circuit affirmed the PTAB's affirmation of the examiner's final rejection based upon subject matter ineligibility.

2. Background

U.S. pat. application no. 12/523,427 designated a method and system of online collaborative content management for online product development.

3. Federal Circuit analysis

a) Alice Step 1

The claims merely designate an abstract economic and business idea which is based upon methods of organizing human activities and mental processes. the servers and database are merely tools by which to automate the abstract economic ideas, but mere automation of abstract ideas upon a conventional computer is not patent eligible subject matter.

b) Alice Step 2

There is no inventive concept, because only generic technology, either individually or as an ordered combination, is designated.

P. [cxLoyalty, Inc. v. Maritz Holdings, Inc.](#), 986 F.3d 1367 (Fed. Cir. 2021)

1. Outcome:

PTAB was affirmed in part and reversed in part, because the original and substitute claims in a post review proceeding comprised ineligible subject matter.

2. Background

a computerized graphical user interface that allows a customer to communicate directly with an online vendor, and comprising a hidden shadow credit card, and an application programming interface.

3. Federal Circuit analysis

a) Alice Step 1

The interfaces are merely generic computerized substitutes for human intermediaries, and the claims are directed to the economic abstract idea of transferring financial information.

b) Alice Step 2

This abstract idea is implemented using generic computers in a well understood, routine and conventional manner. The invention does not contribute a new technology by which computers conceal vendor discounts, and the claims do not designate how to achieve improved computer functionality.

Q. [Electronic Communications Technologies, LLC v. ShoppersChoice.com, LLC](#), 958 F.3d 1178 (Fed. Cir. 2020)

1. Outcome:

The Federal Circuit affirmed the motion to dismiss based upon patent ineligible subject matter.

2. Background

U. S. Pat. No. 9,373,261 was entitled “Secure notification messaging with user option to communicate with delivery or pickup representatives.” The claims addressed an automated notification system comprising memories, processors, transmitters and computer program code. the specification disclosed that the authentication information may be anything recognized by the purchaser.

3. Federal Circuit analysis

a) Alice Step 1

the claim is directed to a long-standing commercial practice, and recording authentication information in a later communication is nothing more than collecting, analyzing and displaying data. that the patent office examiner explicitly confirmed that the claims comprise patent eligible subject matter is not relevant to the judicial analysis, that the invention purportedly increases security is itself an abstract idea.

b) Alice Step 2

there is excessive claim generality in functional terms with only conventional computer components. Patent eligible subject matter requires appropriate claim substantive language and not the claim’s word length. Enablement is a separate legal requirement from the presence of patent eligible subject matter.

R. [Customedia Technologies v. Dish Network Corp. et al.](#), 951 F.3d 1359 (Fed. Cir. 2020) (covered business method review)

1. Outcome:

The Federal Circuit affirmed the PTAB’s affirmance of the examiner’s rejection of claims based upon patent ineligible subject matter.

2. Background

U.S. Pat. Nos. 8,719,090 and 9,053,494 each disclosed a data management and processing system which include storage for

advertising data with programmable storage sections allocated to third persons.

3. Federal Circuit analysis

a) Alice Step 1

the claims are directed to the abstract idea of using a computer to deliver targeted advertising, but dedicating computer memory to advertising data does not improve computer functionality neither the claims nor the specification disclose specific structure or other improvements to computer function.

b) Alice Step 2

there is no inventive concept because the storage with respect to computer hardware.

S. [Enco Systems v. DaVincia](#), 845 Fed. Appx. 953 (Fed. Cir. 2021)

1. Outcome:

The Federal Circuit affirmed the grant of a motion to dismiss under F.R.C.P. 12(b)(6) based upon patent ineligible subject matter.

2. Background

U.S. Pat. No. 7,047,191 disclosed an audio visual (AV) captioning system and method which used conventional speech to text processing, to associate captioned data with the appropriate AV signal.

3. Federal Circuit analysis

a) Alice Step 1

the claims are directed to automating the abstract idea of an AV captioning process, and there is no specific improved computer technology but simply computer implementation, and improved speed and efficiency with a computer does not provide patent subject matter eligibility.

b) Alice Step 2

there are only conventional computer hardware and software, and the specification states that conventional components and techniques are satisfactory, and in any event non-obvious subject matter may still be abstract.

T. In re Board of Trustees of the Leland Stanford Junior University, 989 F.3d 1367 (Fed. Cir. 2021)

1. Outcome:

The Federal Circuit affirmed the PTAB's affirmance of the examiner's final rejection based upon patent ineligible subject matter.

2. Background

U.S. utility patent application no.13/445,925 was directed to methods and computing systems for predicting the parent from whom a gene variant is inherited. The asserted an increase in the accuracy of haploid phase predictions, and where the term 'haploid phase' predicts the parent from whom a gene allele is inherited by using a pedigree and genotype data as well as specific statistical tools, and whereby This additional data enables more accurate estimation in haploid phase predictions for chromosome regions where there was previously no manner for obtaining information on the genetic transfer of a particular inherited trait.

3. Federal Circuit analysis

a) Alice Step 1

a claim for a new abstract idea, such as an improved statistical genetic analysis with additional data, nevertheless remains an abstract idea. The claimed process is not an improved technological process

b) Alice Step 2 the claims do not designate or result in a specialized computer with, for example, a specialized memory or processor.

U. In re Board of Trustees of the Leland Stanford Junior University, 991 F.3d 1245 (Fed. Cir. 2021)

1. Outcome:

The Federal Circuit affirmed the PTAB's affirmance of the examiner's final rejection based upon no patent eligible subject matter.

2. Background

U.S. utility patent application no. 13/486,982 discloses a statistical model which was asserted to more accurately predict a haploid phase. The improvement is directed to more accurately estimating a haplotype phase based upon genotype data obtained through sequencing an individual's genome, and implemented among unrelated persons, and

with enhanced statistical methods

3. Federal Circuit analysis

a) Alice Step 1

As a whole the claims are directed to mathematical calculations and statistical modeling this statistical model---- implemented with a conventional computer---- does not transform the mathematics into patent eligible subject matter.

b) Alice Step 2

The recited steps exclusively designate receiving, extracting and storing data which are well known, routine and conventional steps. Moreover, these claims do not designate specialized memory or processors. that a specific or different combination of mathematical steps provides a more accurate prediction does not transform the abstract idea.

V. *CardioNet LLC et al. v. InfoBionic*, 955 F.3d 1358 (Fed. Cir. 2020), cert. denied 141 S. Ct. 1266 (2021)

1. Outcome:

The Federal Circuit reversed and remanded the grant of a motion to dismiss, because there was actually patent eligible subject matter.

2. Background

U.S. utility patent no. 7,941,207 is directed to a medical device and methods by which atrial fibrillation and atrial flutter are more accurately detected, and where these two conditions comprise loss of coordination between the atria and ventricles of the heart, these two pathologies are more effectively distinguished from other cardiac pathologies, and in part by implementing nonlinear statistical methods.

3. Federal Circuit analysis

a) Alice Step 1

here there are multiple technical improvements to a medical device, and there is no evidence that physicians previously employed the claimed techniques, or that the claims designate computerized pre-existing technologies, and there are no automated mental processes, the claims do not exclusively address mere collection of information the court need not review prior art for a section 101 analysis, and reliance upon the specification is always superseded by the claim language.

W. Boom!Payments, Inc. v. Stripe Inc., 839 Fed. Appx. 528(Fed. Cir. 2021) (non-precedential)

1. Outcome:

The grant of a motion to dismiss was affirmed based upon patent ineligible subject matter.

2. Background

U.S. Pat. Nos. 9,235,857 and 10,346,840 disclosed computerized online systems and methods for buyers to tentatively agree to purchase an item for a negotiated price, and from a particular vendor with a credit card or a debit card. the seller provides the buyer's unique identifier as evidence of the agreed upon transaction, and payment is then authorized by the online system.

3. Federal Circuit analysis

a) Alice Step 1

the claims designate the abstract idea of a payment escrow, in part because an identification code is feasible without computers, so there is no technological solution for an improved computer function.

b) Alice Step 2

although Boom!Payments asserts that its claimed method is not routine or conventional, there are no plausible allegations to support these assertions in its complaint.

X. XY, LLC. et al v. TransOva Genetics LC, 968 F.3d 1323 (Fed. Cir. 2020)

1. Outcome:

Dismissal was reversed in part and remanded, because the claims actually comprised patent eligible subject matter.

2. Background

U.S. Pat. No. RE46,559 designates a method of operating a flow cytometry apparatus to sort individual particles, and which comprises specific detectors, mathematical formulas for rotating multi-dimensional data, and a flow cytometer apparatus for separation of at least two groups of particles. The claimed improvement enhances particle and cell separation, such as between male determining and female determining sperm.

3. Federal Circuit analysis

a) Alice Step 1 the claims as a whole are not directed to a

mathematical equation instead the claims describe a step-by-step method for accomplishing a physical process; and implement a mathematical formula only as part of an improved laboratory procedure comprising specific detectors and cytometer components.

Y. [Whitserve LLC v. Dropbox, Inc.](#), 2021 U.S. App. Lexis 12285 (April 26, 2021) (non-precedential)

1. Outcome:

The grant of a motion to dismiss was affirmed based upon patent ineligible subject matter.

2. Background

U.S. Pat. No. 8,812,437 is entitled “Onsite backup for third party internet based systems. The asserted improvement was the safeguarding of customer data whenever a business outsources data processing to an internet based system for backing up this data to the business’ own computer. the patent discloses each of the following: central computer, client computer communications link between each computer and the internet, as well as a database containing data and software that modifies data records. These computers send a request for data records over the internet, receive the request, and transfer a copy of the requested data records.

3. Federal Circuit analysis

a) Alice Step 1

these claims exclusively recite conventional computer function, and data manipulation, and so these claims are directed to abstract ideas

b) Alice Step 2

storing data is a generic computer function as is sending and receiving data over an electronic network.

IV. The meaning of these decisions?

A. The good news: The majority of decisions addressing subject matter comprising computers disclose a pattern:

1. Claims exclusively comprising abstract ideas implemented by conventional computers are never patent eligible subject matter. fortunately, many of these situations are relatively

- easy to recognize
2. Claims with an improvement to the computers or computer network or other mechanical device: Could be patent eligible subject matter.
 3. Do the claims designate an industrial, laboratory or other technical process in which an improvement comprises an additional computerized step(s)? If so, these claims could be patent eligible.
- B. Biomedical inventions: Is a process diagnostic, treatment, or a laboratory method and/or device?
1. Treatment and laboratory methods and/or devices may be patent eligible.
- C. For subject matter which is potentially patent eligible: Draft the specification and claims very carefully.
1. Are improvements specifically and comprehensively claimed and disclosed?
 2. In particular when drafting claims
 - a) Do the claims encompass all the methods for arriving at a functional or potentially overbroad result? If so, is the subject matter patent ineligible because of pre-emption?
 3. Look at Parker v. Flook, 437 U.S. 584 (1978) and Diamond v. Diehr, 450 U.S. 175 (1981), because process claims with computerized or mathematical steps should resemble those of Diamond v. Diehr.
- D. The not so good news: There appears to be less of a pattern when determining to which extent a specification should 'bolster' a claim.
- E. Hopefully the Supreme Court will review American Axle & Manufacturing, Inc. to resolve
1. The circumstances under which a claim is directed to a natural law, either implicitly or explicitly, and
 2. To which extent is a specification relevant when resolving patent eligible subject matter.

Resources

Resources Specific to this Course

In addition, please see the resources cited within the material.

Resources for the Legal Professional

ABA Center for Professional Responsibility - www.abanet.org/cpr

Chicago Bar Association - www.chicagobar.org

Commission on Professionalism - www.2civility.org

Judicial Inquiry Board - <http://www.illinois.gov/jib>

Illinois Board of Admissions to the Bar - www.ilbaradmissions.org

Illinois Department of Financial and Professional Regulation - www.idfpr.com/default.asp

Illinois Lawyers' Assistance Program, Inc - www.illinoislap.org

Illinois State Bar Association - www.isba.org

Illinois Supreme Court - www.state.il.us/court

Lawyers Trust Fund of Illinois - www.ltf.org

MCLE Program - www.mcleboard.org