

3D Printing

Protecting 3D Printing Related Inventions

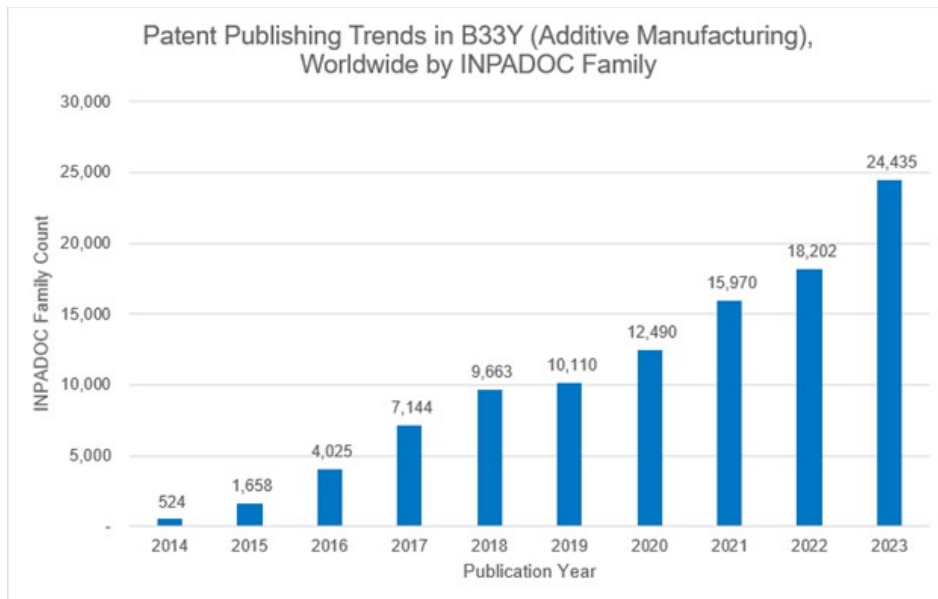
3D printing is an ever-expanding technology sector in which applicants seek U.S. patent protection, with a significant rise in U.S. published patent applications in additive manufacturing since 2014. The market for 3D printing continues to grow and analysts have forecasted that its overall economic impact will surpass \$100 billion by 2032. Marshall Gerstein has been working with clients to build and manage 3D printing related intellectual property matters since this technology began to grow.

Broadly described, 3D printing is any form of additive manufacturing that builds a 3D object by extruding material onto a platform in progressive layers. 3D printers and printing technologies have been around for about 30 years, but only more recently has their adoption become widespread in industries like automotive manufacturing, healthcare and large-scale manufacturing.

Marshall Gerstein has assisted clients with 3D printing technology and associated intellectual property matters in a variety of manufacturing technologies and technical industries, including:

- Medical devices
 - Dental instruments
 - Dental products
 - Surgical guides and tools
- Industrial Equipment
 - Process control systems
 - Valves, actuators, and regulator systems
 - Heat Exchangers
- Personal Goods
 - Sports equipment accessories
- Printing systems and machines

A variety of factors have contributed to the rise of 3D printing technology, including superior machines, improved printing material, and lower costs. Another important factor has been the expiration of several patents covering core 3D printing and additive manufacturing technologies. This led to an increase in market participants. As depicted in the graph below, international patent families related to Additive Manufacturing (patent classification B33Y) have exploded since 2015 and continue to grow in importance through 2023. Inventive thinkers have been developing unique solutions to apply additive manufacturing in aerospace, construction, healthcare, consumer goods, energy management, and electronics.



Marshall Gerstein advises and assists clients in protecting 3D printing technology, including related hardware and software, in the U.S. and around the world. Our team includes highly experienced attorneys, patent agents, and technical specialists, with mechanical, biomedical, electrical and computer engineering degrees and backgrounds, who prepare and prosecute 3D printing related patent applications and assist clients in a variety of related matters. From this seasoned team, Marshall Gerstein has established a 3D Printing Taskforce as part of our Medical Devices Practice Group. Our 3D Printing Taskforce members regularly attend and participate in industry conferences related to 3D printing technology, have presented on 3D printing issues in patent law, and have authored articles in industry publications such as *AIPLA/INNOVATE Magazine* and 3Dprint.com.

Insights

May 2, 2025

"The Overlooked Clean Tech Hero: Additive Manufacturing's Green Potential"

Manufacturing.net

October 9, 2024

USPTO Will Terminate the AFCP 2.0 Program

Marshall Gerstein Alert

July 3, 2024

"3D Printing IP with Meggan Duffy, Marshall Gerstein"

3DPOD

May 31, 2024

"Patent Filings Describe Materials Under Consideration for Moon Habitats"

ENR

April 18, 2024

"Patent Filings Offer Details of ICON's Potential Trip to the Moon"

ENR

November 13, 2023

"Federal Circuit Imperils Term-Adjusted Patents"

ALM's IP Strategist

April 1, 2023

"How Companies Can Benefit from 3D Printing"

IP Strategist

January 24, 2023

"Patenting 3D Printing Innovations: Why, When, How, and Who"

TIPE 3D Printing Conference

February 25, 2022

"3D Printing Innovation and Patent Protection During the Pandemic"

Med-Tech Innovation News

January 19, 2021

"Patenting Considerations for Protecting 3D Printing Innovations"

TIPE | 2022, powered by Women in 3D Printing

August 20, 2020

Federal Circuit Grants Licensees More Control Over Infringement Litigation

Marshall Gerstein Alert

July 13, 2020

"Patenting Considerations for 3D-Printed Medical Devices"

24x7 Magazine

March 2020 Issue

"3D Printing: Reshaping our Engineering Culture?" (featured quotes)

Plastics Engineering Magazine, Volume 76, Issue 3

February 20, 2020

"Some U.S. Patent Law Basics for 3D Printing"

3Dprint.com

September 2018

"Making 3D Printing Eco-Friendly: A Potential Opportunity for Patent Protection"

INNOVATE Magazine

May 3, 2018

"The everything machine: Push the button for toys, guns, car parts, earrings, jawbones — and your clients' intellectual property" (featured quotes)

Chicago Lawyer Magazine

May 2, 2018

3D Printing Roundtable

Fall 2017 Edition

"Making 3D Printing Eco-Friendly: A Potential Opportunity for Patent Protection"

Illinois Manufacturers' Association Journal Fall 2017 Edition

November 2, 2011

“Protecting your Intellectual Property Globally”

Hosted collaboratively among the International Trade Association of Greater Chicago (ITA), the Alliance for Illinois Manufacturing/NORBIC, and the Chicago Intellectual Property Alliance (CIPA)