

DAVÉ LAW GROUP, LLC (DLG)



INTELLECTUAL PROPERTY (IP) SERVICES

INTRODUCTION TO DLG-LXC AND VALUE PROPOSITION

DAVÉ LAW GROUP, LLC (DLG) – US LAW FIRM

- **DLG:**
 - Formed in 2017; registered in Virginia, USA; minority owned firm
 - 100% ownership: Aparna and Raj Davé
 - President: Dr. Raj S. Davé; CEO: Aparna Davé
- **Dr. Raj S Davé:**
 - Practicing IP law since 1996
 - Formerly partner at top-tier US law firms and recognized as “IP Star” by Managing Intellectual Property
- **Aparna Davé:** Trademark Attorney
- **DLG’s Goal:** To provide **top-quality personalized services** to clients and **train women** to become leaders in the field of IP

DR. RAJ S DAVÉ (PRESIDENT)

- **Education:**
 - B.S. (Chemical Engineering), Indian Institute of Technology, 1981
 - M.S. (Polymer Science), Washington State University, 1983
 - Ph.D. (Materials Science – Composites), Washington University, 1986
 - J.D., University of Connecticut, 1996
 - LL.M. (Patent Law), George Washington University, 2003
- **LL.M. thesis:** “A MATHEMATICAL APPROACH TO CLAIM ELEMENTS AND THE DOCTRINE OF EQUIVALENTS,”
 - (Thesis Advisor – former Chief Judge [Randall R. Rader](#) of the United States Court of Appeals for the Federal Circuit), published in the [Harvard Journal of Law & Technology - the most cited technology law journal](#)
- **Pre-law Experience:** Academia and Industry (Faculty and Scientist), 1986-1996
- **Hobbies:** Scuba Diving, Sailing, Paragliding, Hiking, and Teaching IP Law



LEXPERTCONSILIUM LLP (LXC) – DLG's BACK OFFICE

- **LXC:**
 - Formed in 2018; registered in India
 - Majority ownership: Aparna Davé
 - President: Mr. Krishna Shastri since 2019
 - VP: Mr. Gaurav Sagarwal since 2019
- **Mr. Krishna Shastri:**
 - Expert in Engineering and Software patents
 - Formerly Senior Vice-President, Product Design & Development, Patni Computers
- **14 Professionals:**
 - President, VP
 - 7 Patent Agents (2 PhD; 3 MS)
 - 5 Paralegals and Support Staff

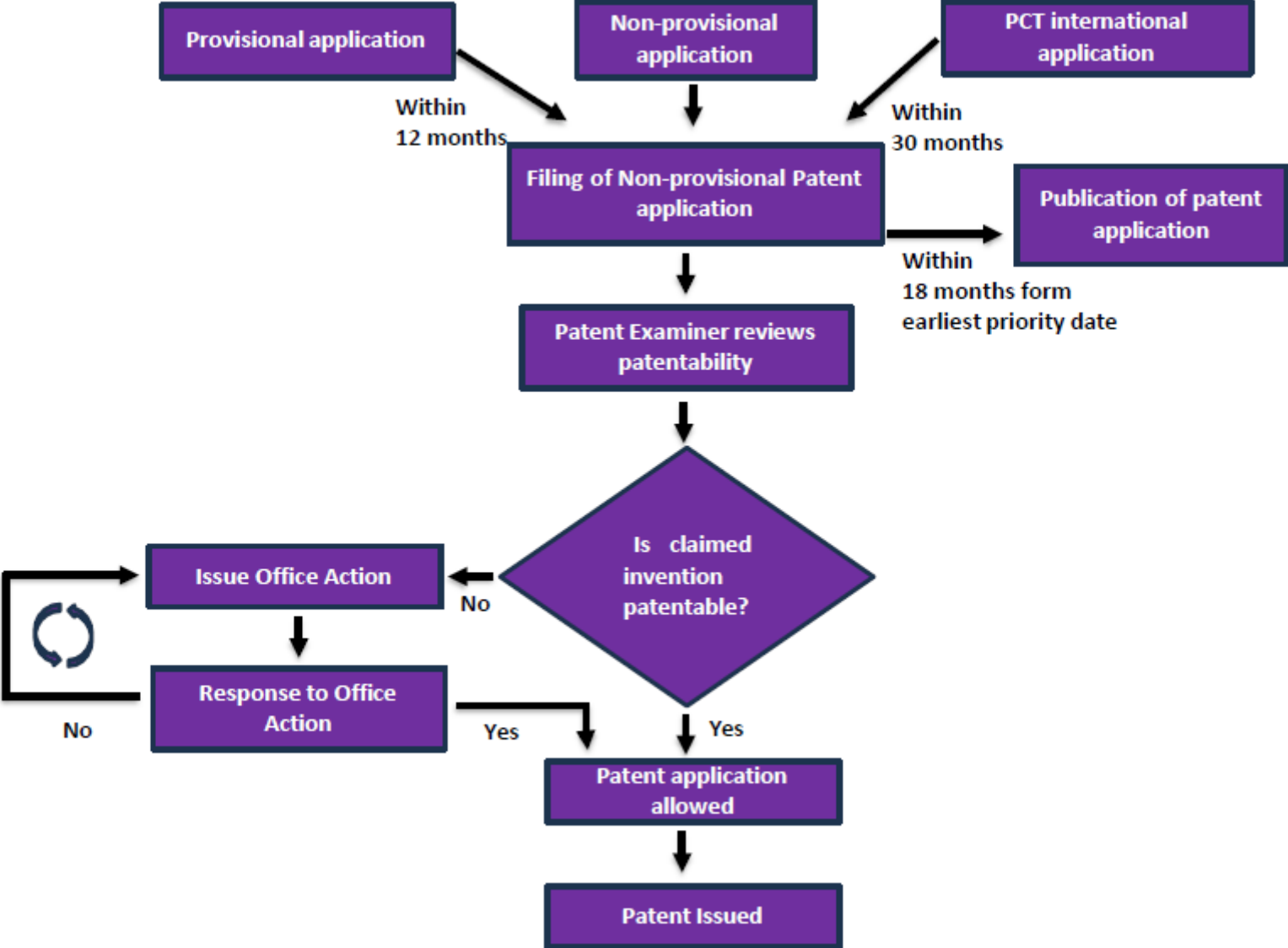
WHAT ARE DLG'S CAPABILITIES?

- **Patents**
 - Engineering
 - Software
 - Chemistry and Life Sciences
- **Trademarks**

WHAT DIFFERENTIATES DLG FROM OTHER US IP LAW FIRMS?

- **Cost**
- **Quality**
- **Timeliness**

UTILITY PATENT PROSECUTION PROCESS



COST: TYPICAL COST OF GETTING A US PATENT

Description	Cost of getting a US patent using US Firms
Patent Drafting	\$12,000.00
Search Expenses (not included in Patent Drafting)	\$4,400.00
Prosecution (typical)	\$18,150.00
Appeal Costs (apportioned)	\$5,689.00
Notice of Allowance review	\$1,320.00
USPTO Filing Fees	\$664.00
Appeal Fees	\$336.00
Issue Fee	\$480.00
Maintenance Fees paid to USPTO	\$5,384.00
Annuity Vendor Fees (Third Party)	\$2,216.00
Total	\$50,639.00

Fees paid to USPTO: \$6,864
(includes Maintenance Fees: \$5,384)
Fees paid to US Firm: \$41,559
Total Cost: \$50,639

1. All USPTO Fees are based on Small Entity fees as per 2023 USPTO Fee schedule. Large entity fees are two times higher. These vary from year to year.
2. All attorney fees are average fees based on American Intellectual Property Lawyers Association bi-annual survey of 2019.
3. The total cost of \$50,639 is an average cost of a patent in the US. It reflects the average of 4.2 office actions, a **75% probability** of a Pre-Appeal Conference, and a **25% probability** of a Full Appeal.

Source: <https://blueironip.com/how-much-does-a-patent-cost/>

TYPICAL COST OF GETTING A US PATENT THROUGH DLG

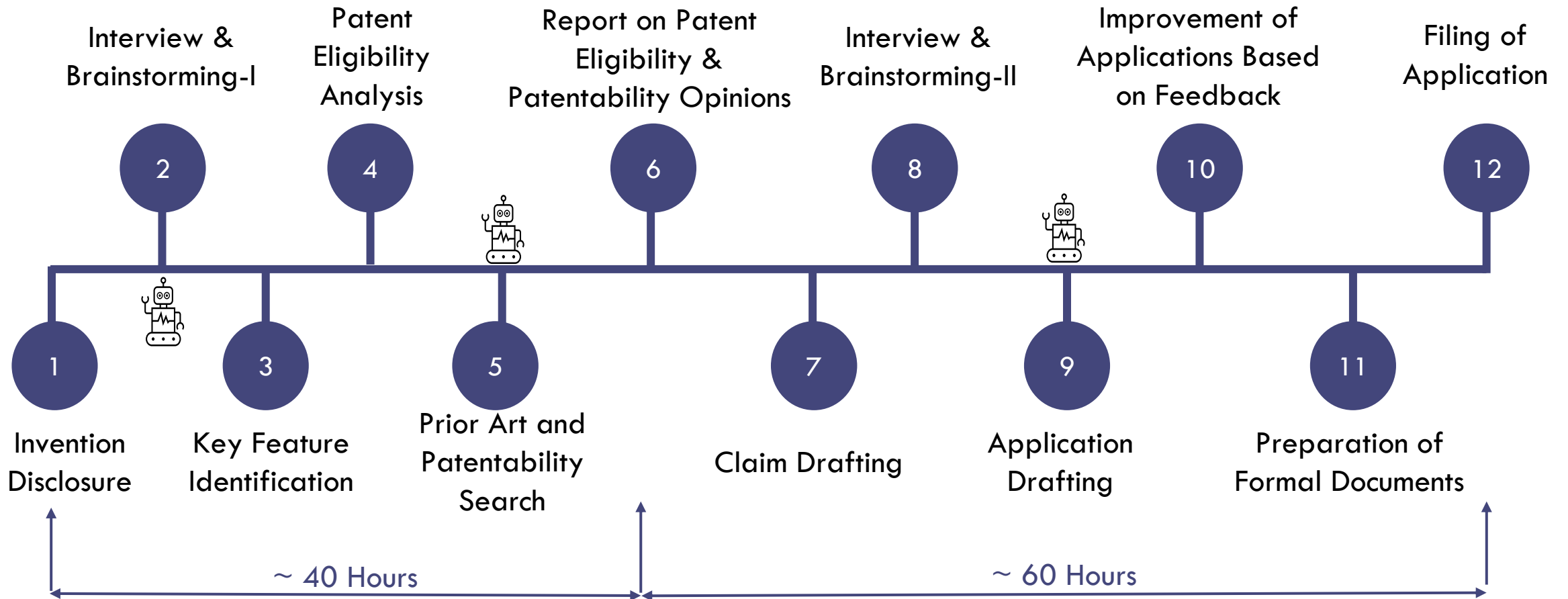
Description	Cost of getting a US patent using DLG
Patent Drafting	\$10,000.00
Search Expenses (included in Patent Drafting)	\$0.00
Prosecution (typical)	\$7,200.00
Appeal Costs (apportioned)	\$400.00
Notice of Allowance review	\$900.00
USPTO Filing Fees	\$664.00
Appeal Fees	\$336.00
Issue Fee	\$480.00
Maintenance Fees paid to USPTO	\$5,384.00
Annuity Vendor Fees (Third Party)	\$2,216.00
Total	\$27,580.00

Fees paid to USPTO: \$6,864
 (includes Maintenance Fees: \$5,384)
Fees paid to DLG: \$18,500
 Total Cost: \$27,580
Difference in Professional Fees (US Firm vs DLG): \$23,059

1. All USPTO Fees are based on Small Entity fees as per 2023 USPTO fee schedule. Large entity fees are two times higher. These vary from year to year.
2. Attorney fees are based on 2023 fee schedule of DLG.
3. The total cost of \$27,580 is an average cost of a patent in the US. It reflects the average of 2 office actions and 2 examiner interviews, a **2% probability** of a Pre-Appeal Conference, and **less than 1% probability** of a Full Appeal.

QUALITY: HOW DLG MAKES THE PATENTING PROCESS BETTER?

DLG'S 12-STEP APPROACH FOR PATENT DRAFTING



AI Assistance

***Additional analysis for subject matter eligibility for Software related inventions**

DETERMINATION OF NOVELTY

Patentability analysis report containing heatmap of features of the invention disclosed in the prior art. (Red colour indicates the feature disclosed in the respective prior art; Green colour indicates the feature not disclosed in the respective prior art.)

Features	D1	D2	D3	D4	D5	D6	D7
F1: Biodegradable transdermal patch system with reusable cartridge for drug	YES	NO	NO	NO	NO	NO	NO
F2: Password protected iontophoretic transdermal drug delivery system	NO	NO	NO	NO	NO	NO	NO
F3: Electric battery operated iontophoretic transdermal patch for drug delivery	NO	YES	NO	YES	YES	NO	NO
F4: Transdermal patch system for dual drug delivery system	YES	NO	YES	YES	YES	NO	NO
F5: Use of active pads with iontophoresis to deliver the drug	NO	NO	YES	NO	NO	YES	NO
F6: Transdermal patch system for drug delivery with safeguards	YES	YES	NO	YES	NO	YES	YES
F7: Transdermal patch system with biological indicators or sensors	NO	NO	YES	NO	NO	NO	YES

[US 11,369,789](#)

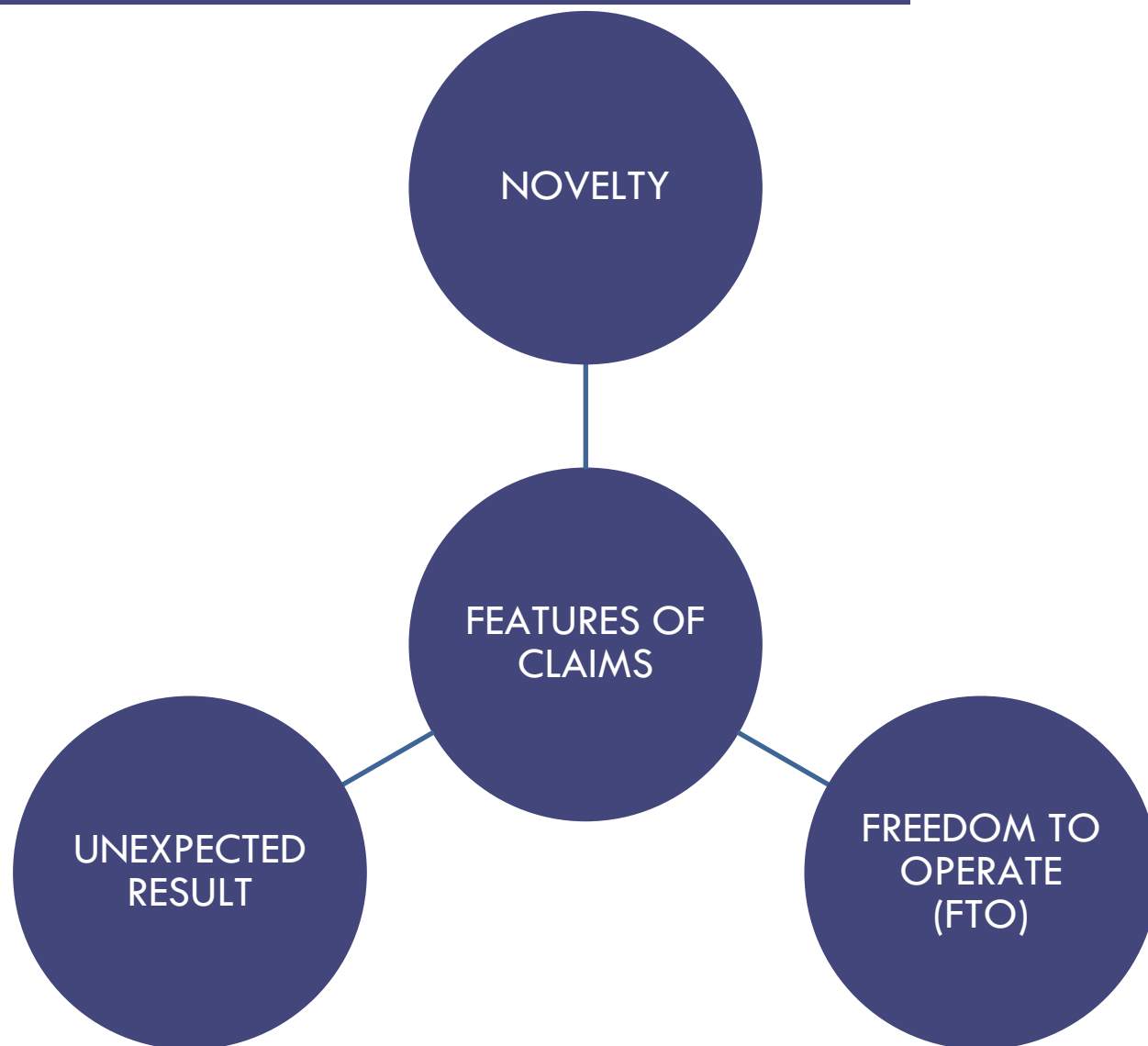
WHAT IF A SINGLE PRIOR ART TEACHES EVERY INVENTIVE FEATURE?

- **DLG informs Client that the invention as currently conceived lacks novelty:** All features of the invention are disclosed in a known prior art.
- **DLG undertakes “white space” analysis:** DLG identifies additional features related to the invention that are **novel** and likely to be an **unexpected result**.
- **Client decides whether to pursue or doom the patent:** Client pursues the patent combining original plus newly identified features of the invention, if the combination meets business objectives, or dooms the patent due to the closest prior art.

DLG'S APPROACH FOR CLAIM DRAFTING

Claims are drafted, such that:

- **Novelty:** Recite some features not disclosed in any known prior art.
- **Unexpected Result:** Recite some features that are likely to be an unexpected result.
- **Freedom to Operate:** Avoid at least one feature that is recited in an independent claim of an unexpired prior art patent and advise Client to NOT include this feature in Client's product or process.



BENEFITS OF THE 12-STEP APPROACH

- ***High-quality patentability analysis and patent drafting is time consuming***
 - US law firms typically charge about \$12,000 to prepare a patent, without doing a patentability analysis or outsourcing it, and spend about **30-40 hours**.
 - DLG charges \$10,000 to prepare a high-quality patent (which includes a patentability analysis done by the same patent agent who prepares the patent) and spends about **100 hours**.
- ***Minimum overhead on the inventors***
 - 12-step approach allows DLG to minimize the overhead on the inventors.
 - DLG records and transcribes every inventor interview with permission from the inventors and thereby avoids back-and-forth communications with the inventors.

BENEFITS OF THE 12-STEP APPROACH (continued)

- ***DLG does not file patents doomed to fail***
 - After undertaking a thorough patentability analysis, DLG advises clients NOT to file a patent if an invention is not novel and patentable.
- ***Minimize objections from the USPTO***
 - Conduct Examiner Interview before submitting the response, amend the draft response based on the feedback from the Examiner, and submit with the USPTO.
 - Client effectively gets two responses at the price of one.
- ***Make the process as quick as possible***
 - DLG has outstanding track record of getting patent applications allowed in 6-months to 1-year from the filing date using Track-1 (fast track) approach.

BOTTOM LINE: HOW WILL YOU BENEFIT?

- **Cost saving of more than \$23K over life of the patent due to effective billing rate of \$100/hour for patent prosecution**
 - Maximize client services (not profit-per-partner) in a cost-effective manner.
 - Fixed and agreed upon fees – thus no surprises!
- **Lesser conflicts compared to big firms – DLG does NOT represent your competitors**
 - Advise clients on best suited IP strategies (e.g., defensive or offensive).
 - Assist clients in developing monetizable IP portfolios that can be targeted against competitors.
- **Established protocols (e.g., 12-Step Approach) and quality checks**
 - Better than big law firm quality.
 - DLG has English-speaking proofreaders in the US that proof-read every document prepared by LXC professionals in India.
- **DLG's patent allowance success rate is 100% whereas the average approval rate of a patent application by the USPTO from 2011-2020 is 52.8%.***

*Source: <https://patentexperts.org/patent/statistics/#:~:text=From%202011%2D2020%20the%20USPTO,Design%20Patents%3A%2069.2%25>

HOW DLG CAN HELP YOU

PATENT PREPRATION & PROSECUTION

- **Portfolio Development**

- DLG has **strong technical knowledge** in multiple technologies
- DLG can help you develop a more **robust US patent portfolio** on future technologies
- DLG has **significant experience** in developing large US patent portfolios
- Raj has **prepared and prosecuted 3,500 patents** over 27 years
- Raj has **prosecuted 6,000 patents** over 27 years
- DLG could do more US filings for you because of the **value-driven fixed-fee cost structure**

PATENT STRATEGY

- **Create Barriers For Your Competitors**
 - **Ideation and patenting** on anticipated technical advances – DLG does this for some clients
 - **Undertake targeted prosecution** for patent assertion – *DLG does this for several clients!*
 - **Identify patents for potential assertion** against competitors
 - Prepare **infringement charts** (aka “evidence-of-use charts”)
 - Help you in **buying and licensing-in/out** patents

PATENT CLEARANCE, NON-INFRINGEMENT AND INVALIDITY OPINIONS

- Raj has a **proven track record** for conducting patent clearances and preparing non-infringement and invalidity opinions.
- Raj has conducted numerous patent clearances in advance of product launches and **prepared over 500 non-infringement opinions** and over **100 invalidity opinions** in the last 25 years.
- Raj is an **expert in claim construction, literal infringement, and infringement under the doctrine of equivalence.**
- Raj has published papers on claim construction and the doctrine of equivalence in the Harvard Journal of Law & Technology and the Yale Journal of Law & Technology.
- DLG has served as IP “**clean team**” in mergers and acquisitions (M&A) to avoid the risk of trade secrets contamination of the buyer.

TRADEMARK PREPRATION & PROSECUTION

- DLG assists client in clearance **searches** and provides **advice** relating to selection of new marks
- DLG's trademark services include:
 - Preparation and prosecution of federal and international registration applications, including Madrid Protocol applications over time.
 - Coordination of foreign filings through our worldwide network of foreign associates.
 - Licensing, assignment and acquisition of marks.

CASE STUDY 1: LITHIUM WERKS

- Reliance decided to acquire Lithium Werks (LW) in 2021
- Reliance hired Covington as M&A Firm
- Reliance and Covington recognized potential infringement risk of third-party patents
- Reliance instructed LW to retain DLG for IP Risk Analysis and Abatement
- DLG analyzed LW's future products against third-party patents
- DLG helped obtain transferable licenses and provided 37 non-infringement opinions
- Reliance acquired LW for \$61 million in 2022

business-standard.com/article/companies/reliance-new-energy-to-acquire-assets-of-lithium-werks-for-61

HOME MARKETS COMPANIES OPINION SPECIALS TECH PF PORTFOLIO BS SHOWS

Reliance New Energy to acquire assets of Lithium Werks for \$61 mn

Incorporated in 2017, Lithium Werks is a cobalt-free lithium battery technology and manufacturing company, with operations in the US, Europe and China and customers worldwide

Topics
Reliance Industries | lithium | Lithium battery

BS Web Team | New Delhi
Last Updated at March 14, 2022 20:12 IST

ENTERPRISE

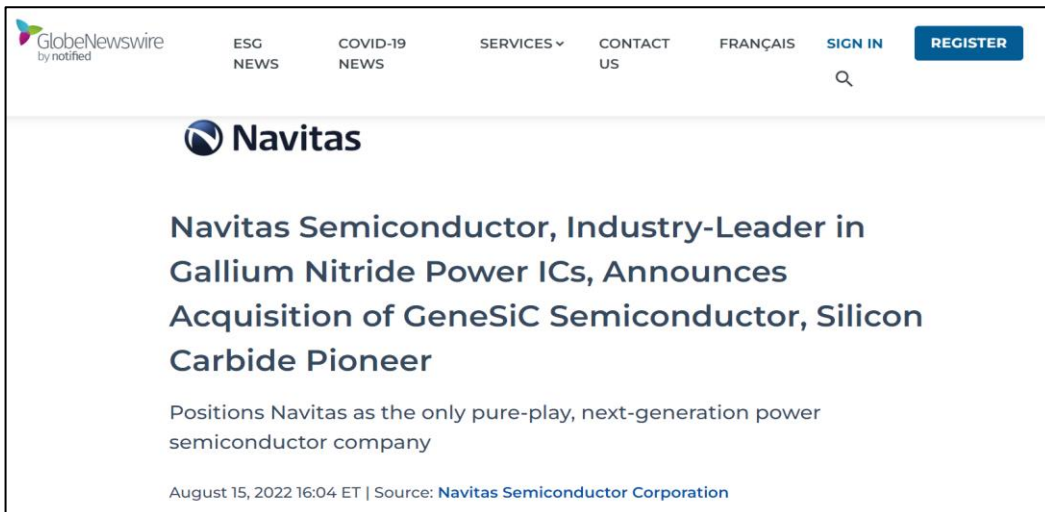
Reliance acquires Lithium Werks to scale up battery manufacturing in India

The deal, valued at \$61 million, includes funding for future growth and is expected to complete by June 2022

By **FORTUNEINDIA.COM**, Mar 16, 2022 | 3 min read

CASE STUDY 2: GENESIC SEMICONDUCTORS (GENESIC)

- GeneSiC retained DLG in 2018
- DLG helped build an extensive patent portfolio under USPTO's Fast Track patent examination
- Navitas Semiconductor acquired GeneSiC in 2022 for around \$300 million (\$100 million in cash, in addition to stock and other incentives)
- GeneSiC's IP portfolio was recognized essential for the deal



The screenshot shows a press release on the GlobeNewswire website. The header includes the logo and navigation links for ESG NEWS, COVID-19 NEWS, SERVICES, CONTACT US, FRANÇAIS, SIGN IN, and REGISTER. The main content features the Navitas logo and the headline: "Navitas Semiconductor, Industry-Leader in Gallium Nitride Power ICs, Announces Acquisition of GeneSiC Semiconductor, Silicon Carbide Pioneer". Below the headline, it states: "Positions Navitas as the only pure-play, next-generation power semiconductor company". The date and source are listed as "August 15, 2022 16:04 ET | Source: Navitas Semiconductor Corporation".



The screenshot shows the GeneSiC website. The header includes the GeneSiC logo and navigation links for Home, Sales Support, Technical Support, News, Careers, and Contact. The main content features a press release headline: "Navitas Semiconductor, Industry-Leader in Gallium Nitride Power ICs, Announces Acquisition of GeneSiC Semiconductor, Silicon Carbide Pioneer". Below the headline, there is a large graphic with the Navitas logo and the chemical formula $GaN + SiC$, with GaN labeled as Gallium Nitride and SiC labeled as Silicon Carbide. The graphic also includes the GaNEast and GeneSiC logos.

THANK YOU

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