

# Michael Nranian

## Expert in Intellectual Property & Product Liability

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### Education

#### Wayne State University

MS Electrical Engineering, 1991

BS Electrical & Computer Engineering, 1993

BS Chemical Engineering, 1984

Juris Doctor, 1999

#### University of Michigan

MBA, 2002



### Qualifications

Six Sigma Black Belt – American Society for Quality & International Quality Federation; Licensed Professional Engineer; Certified Project Management Professional; Eagle Scout; Accident Reconstruction – Northwestern University; Active Secret Security Clearance; Admitted to State Bars of Michigan & Texas, United States Patent and Trademark Office, U.S. Supreme Court

### INTELLECTUAL PROPERTY SERVICES AND EXPERIENCE INCLUDE:

- Evaluation of patent infringement/non-infringement, and patent validity/invalidity, including America Invents Act, and 101, 102, 103, 112 and prior art arguments including analyses under literal infringement and the under the doctrine of equivalents. Prosecution history estoppel.
- Development of claim charts for Markman hearings, ITC & federal cases, Inter Partes reviews. Expert reports, depositions, hearing and trial testimony.
- Technology standards boards and licensing authorities, antitrust/DOJ, technology development and transfer, patents, trademarks, trade secrets, copyrights, data rights, trademark infringement/dilution, unfair competition/trade, false/deceptive advertising Lanham Act, Class Actions, etc.
- Georgia-Pacific factors analyses for determining reasonable royalty for plaintiff or defense. Willful infringement arguments.
- Development and Analysis of Markman briefs, claim charts, conducting prior art searches, and the analyses of patent file wrappers.
- Discovery and motion practice, summary judgment proceedings, evidentiary hearings, motions in limine, opposition and reply briefs.
- Patent Cooperation Treaty Applications, U.S. applications, international filings. Post-Grant Review, Inter Partes Review, Patent Trial & Appeal Board.
- Prior art/patentability research in technical literature, publications, product specifications, and dissertations to analyze validity and obviousness.
- Litigation support and technology education in patent disputes, Federal Cases, ITC cases, & re-examinations, derivation proceedings, prior user rights.
- Represent clients in all aspects of electrical, chemical, software, computers, microprocessors, & automotive components/systems for all aspects of intellectual property/litigation. Cellular, telecommunication, GPS/navigation, mobile, telematics, info/data/transmission, Human Machine Interfaces, etc.
- Deposition, hearing and trial experience in state and federal jurisdictions throughout the United States.
- **Cases include:** Magna v. TRW; Bradley v. Fontaine Trailer; ATI; Remy v. WAI (ITC); Lucent/Gateway/MPEG; Tendler v. Onstar; Acer/Gateway v. HP (ITC) Mobileye v. Picutup; Transtex v. Ridge; KAR v. Ford, Speedguage v. Inthinc; Zoao Controls, Freedom Motors v. Allegiant; Dorman v. Paccar & other cases

### PRODUCT LIABILITY SERVICES AND EXPERIENCE INCLUDE:

- Direct participation in more than 300 litigation cases with in-depth evaluations of multiple high-dollar claims and lawsuits. Forensic Analyses.
- Expert witness reports, inspections, accident reconstruction, photographs, occupant kinematics & injury causation, component and system analyses.
- Development of case and trial strategy, summary judgment proceedings, evidentiary hearings, motions in limine, opposition and reply briefs.
- Deposition, hearing and trial experience in state and federal jurisdictions throughout the United States as Expert Witness and Corporate Representative.
- All areas of discovery, preparing and/or obtaining sets of requests for production, interrogatories, requests for admissions. E-discovery.
- Preparation of other witnesses prior to their depositions and trial testimonies, including all potential cross-examination questions. Forensic Analyses.
- Product Liability Law, indemnification, injury thresholds and regulatory requirements, including all FMVSS interpretation/compliance.
- Optical/vision systems, warning systems, forward collision/lane departure warning, medical devices, wheelchairs, and handicap assistance devices.
- Automotive, truck (including tractor-trailer) systems, sensing systems, including all crash recorders (Direct design experience in these modules for over 20 years). Accident reconstruction and analysis of crash pulse information. Electrical, electronic, electro-mechanical components and systems.
- Design validation plans and reports, failure modes and effects analyses, product prove-out, design verification, reliability/durability analyses/assessment.
- Analysis of component defects including seats, seatbelts, curtains, airbags, roof crush, structure, doors, all modes of sensors, crashworthiness.
- Electrical systems and architecture, fire cause and origin, lidar/radar, sensors, camera/optical/vision, warning & diagnostic system & fault code analyses.
- Insurance law, no fault insurance law, subrogation. Automotive domestic/international OEMs, customers, suppliers, manufacturing, operations.
- Field Analysis of Product Liability Issues and the Implementation of Design Changes to Reduce Exposure. Forensics. Analysis of Alternative Designs.
- Regulatory pre-emption arguments, express, implied, or fact-specific analyses. Workplace safety/standards/policies, Fall Protection, - OSHA, ANSI, etc.
- Depositions, Expert Testimony, Trial Testimony. Please see Judicial Experience/Testimony History on website (too much to list here).

### Summary of Professional Experience

*Principal - AUTOMOTIVE DESIGN ANALYSIS, South Lyon, MI* - Technical consulting practice conducting objective, expert analysis, research, and investigation of all aspects of Intellectual Property; Patents, Products and Technologies; and Product Liability, defect investigation, Regulatory compliance. Forensic Analyses.

*IP - Chief Scientist's Office TARDEC/TACOM - U.S. Army, Warren, MI* - Develop Invention disclosures/patents/contracts. Consult contractually (GTA & Alion).

*Associate, Intellectual Property - Vivacqua Law, Ann Arbor, MI* - Represent clients in all intellectual property aspects of electrical, chemical, software, and automotive.

*Principal Systems Engineer - TACOM - U.S. Army, Warren, MI* - Conduct Systems Engineering/ Manage Cross-Functional Teams. DoD contracts. Consult via Raytheon Risk Analysis/Decision Analysis Lead - General Dynamics, Sterling Hts., MI - Decision analysis, trade studies, systems engineering, risk analysis, & mitigation.

*Intellectual Property Litigation Associate, Dechert LLP, Austin, TX* - Represent clients in all aspects of electrical, chemical, software, and computers involving all aspects of intellectual property, including licensing, USPTO matters, joint development agreements, contracts, opinion work, infringement analyses, standards boards, copyrights, trade secrets, & antitrust issues. Discovery, motion practice, trial/ settlement procedures. Cases include Lucent/MPT v. Gateway MPEG proceedings, Apple Computer-Lucent Licensing negotiations, Tendler v. Onstar, and Acer/Gateway v. Hewlett Packard International Trade Commission litigation.

*Design Analysis Engineer/Technical Specialist/Engineering Manager, FORD, Dearborn, MI* - Technical analysis of vehicles, systems, components, and diagnostics. Act as corporate representative and expert witness; testify in trials and depositions. Conduct accident investigations and prepare expert witness reports and responses to requests for discovery. Expert in FMVSS, ECE, regulatory, due-care, corporate standards, warnings, SAE and NHTSA publications, information for NHTSA inquiries, recalls, notices, vehicle diagnostic, OBDII interfaces, vehicle bus interfaces, communication protocols, human machine interface, analysis/interpretation of electrical components, system information stored in electronic crash sensors, diagnostic modules, system modules. Lead design, development, testing, and implementation of advanced-technology passive/active restraint systems. Conducted numerous (hundreds) crash, sled, and component tests. Developed design verification plans & reports, failure modes & effects analyses, product & production validation plans, and then develop the products & systems to meet these requirements. Quality control/assurance.

*Senior Project Engineer, General Motors, Troy, MI* - Design, development, testing, and release of electrical system, software/algorithm, sensing, and airbag and airbag suppression systems for all GM truck lines. FMVSS, ECE, corporate specifications and design standards, FMEA, DVPR, control plans, and Due-Care requirements.

*Senior Project Engineer, AlliedSignal, Sterling Hts., MI* - Managed European, Pacific Rim, & domestic programs. Design and development of electrical systems & components, airbag modules, sensors, and airbag systems. Developed statements of work and comprehensive system design/test requirements, contracts/subcontracts.

## **MICHAEL NRANIAN**

**Cell: 248-376-0338**

### **ADDITIONAL INTELLECTUAL PROPERTY INFORMATION:**

I have deposition, hearing and trial experience in state and federal jurisdictions throughout the United States. Additional areas of experience include:

- Evaluation of patent infringement/non-infringement, and patent validity/invalidity, including America Invents Act & 101, 102, 103, 112 and prior art arguments. Analyses performed under literal infringement and the doctrine of equivalents. Prosecution History Estoppel.
- Development and Analysis of claim charts for Markman hearings, ITC cases, & federal cases, and Inter Partes reviews.
- Expert reports, depositions, hearing and trial testimony.
- Intellectual property, including technology standards boards and licensing authorities, antitrust/DOJ, technology development and transfer, patents, trademarks, trade secrets, trademark infringement/dilution, unfair competition/trade, false/deceptive advertising, Lanham Act, copyrights. Analyses of designs for Trade secrets miss-appropriation.
- Contracts negotiation, contract drafting/interpretation, and IP related clauses, licensing indemnification, business financial impact assessments, valuation & potential ROI. Georgia-Pacific factors analyses for determining reasonable royalty for plaintiff or defense. Willful infringement arguments. Goodwill damages. Class actions.
- Developing and analyzing Markman briefs, conduct prior art searches, and the analyses of patent file wrappers.
- Contracts, licenses, joint development agreements, statements of work.
- All areas of discovery and motion practice as well as trial and settlement procedures.
- Summary judgment proceedings, evidentiary hearings, motions in limine, opposition & reply reports, briefs, claim charts.
- Analysis and assessment of industry trends - followed by working with product development activities, program managers, and cross-functional teams for new product innovation and to implement strategic design changes and the development of new products.
- Commercialization of innovations and intellectual property. Assessment of the engineering development/product development necessary and likelihood of innovations and/or patented inventions to become commercial products.
- Patent Cooperation Treaty Applications, U.S. applications, & international filings. Post-Grant Review, Inter Partes Review. Patent Drafting, Prosecution, and USPTO Office Action responses.
- Clarification of prior art in technical literature, publications, product specifications, and dissertations to analyze validity and obviousness.
- Specification and literature analysis of scientific and engineering patents.
- Product and technology analysis, patent portfolios, patentability research.
- Litigation support and technology education in patent disputes, claim charts, patent reexaminations, derivation proceedings, prior user rights.
- Technology Contracts, Freedom of Operation and Infringement Analyses. Technology Standards Groups and Licensing Authorities.
- All Aspects of Discovery and Disclosure Requirements, e-Discovery, Discovery Policy and Strategy. Document Production and Accurate/Consistent Response Preparation.
- Flesh out and convey the novel and innovative arguments for new technologies and inventions, and understand and convey technical similarities and differences for infringement analyses.
- Design Validation Plans and Reports, Failure Modes and Effects Analyses, product prove-out, design verification, reliability and durability analyses.
- Represent clients in all aspects of electrical, chemical, software, source code/algorithm methods/processes, computers, microprocessors, & automotive components & systems involving all aspects of intellectual property litigation. Safety systems, accident avoidance, telematics/telecommunications, mobile cellular information data transmission (transmitters/receivers), traffic/weather, communication protocols, radio optical satellite wireless mediums, GPS, navigation, monitoring/surveillance/security/tracking systems, camera/vision/optical systems, fleet management systems, Bluetooth, smartphones, truck/commercial/recreational vehicles, construction/excavation, electrical/electronic, diagnostics. Human machine interfaces/displays, diagnostics, warnings. Data/ storage/retrieval. Workplace safety.

### **CASES INCLUDE**

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| • Mobileye v. iOnRoad                    | • Remy v. WAI et al (ITC)                        |
| • Transtex v. Ridge                      | • Speedguage v. Inthinc                          |
| • Bradley et al v. Fontaine Trailer      | • Dorman v. Paccar (Design Patents)              |
| • Joao Controls                          | • ATI v. Siemens et al                           |
| • Bosch v. Autel                         | • Hagenbuch v. Toyota (IPR)                      |
| • Lucent/MPT v. Gateway MPEG proceedings | • Vehicle Interface Technologies v. Ford, Jaguar |
| • KAR v. Ford                            | • Freedom Motors v. Allegiant                    |
| • VOT v. Ford                            | • Magna v. TRW                                   |

*Also involved in other cases as technical expert consultant*

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## **MICHAEL NRANIAN**

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### **ADDITIONAL PRODUCT LIABILITY EXPERIENCE INFORMATION:**

I have directly participated in more than 300 litigation cases providing overall technical and legal case management from notice through trial if necessary, including working with trial counsel, development of case and trial strategy, dispute resolution, and in-depth evaluations of multiple high-dollar lawsuits and claims. I have extensive experience in analyzing and assessing litigation risks. I have direct experience in all areas of discovery and motion practice as well as trial and settlement procedures. I understand the importance of accurate and consistent discovery and I have overseen and prepared hundreds of sets of responses to requests for productions, interrogatories, and requests for admissions. I have deposition, hearing and trial experience in state and federal jurisdictions throughout the United States. I have extensive experience in providing litigation and counseling support to national clients. I have extensive experience in analyzing and assessing claims and then working with product development activities and leading cross-functional teams to implement the necessary design changes to continuously improve products and designs and reduce overall exposure. I have direct experience in summary judgment proceedings, evidentiary hearings, motions in limine, as well as the related opposition and reply documents. I have prepared numerous expert witness reports, and have served as the expert witness and/or corporate representative in depositions, hearings, and trials, in state and federal jurisdictions throughout the United States for product liability cases. I have prepared and prepped other witnesses prior to their depositions and trial testimonies, including all potential cross-examination questions. Complete Forensic Analyses and Investigations.

Additionally, through these experiences, I have developed strong working knowledge of the following areas, among others:

- Product Liability Law, Automotive Defense, Indemnification. Forensic Analyses.
- Injury Thresholds as Related to Statutory Bars. Injury causation. Kinematic analyses.
- Medical devices, wheelchairs, motorized wheelchairs, controllers, and handicap assistance devices.
- Workplace safety/standards, Fall Protection, - OSHA, ANSI, etc. Inertia mechanisms, webbing, harnesses, forensics.
- Regulatory Requirements, including all FMVSS, ECE, SAE, Due-Care, Product Prove-out Interpretation/Compliance.
- Automotive and Truck (including Tractor-Trailer) systems, commercial recreational vehicles, construction equipment.
- Sensing systems, including all crash recorders (Direct design experience in these modules for over 20 years).
- Programming and algorithm development and verification to meet system requirements.
- Design Validation Plans and Reports, Failure Modes and Effects Analyses, product prove-out, design verification, reliability and durability analyses.
- Electrical, electronic, electro-mechanical, camera/vision, weight/occupant sensing, components and systems. Software, source code, algorithm, processes and methods. Quality control/assurance.
- Analysis of component defects including seats, seatbelts, pre-tensioners, load limiters, curtains, airbags, roof crush, structure, doors, and all modes of sensors. FMVSS and IIHS testing. Sled & Barrier & Crash testing. Forensic Analyses.
- Analysis of alternative designs, as well as design and product prove-out assessment and field analysis.
- Occupant kinematics & injury causation. Occupant detection and Out-of-position occupant detection & injury mitigation.
- Accident reconstruction and analysis of crash pulse information. Parameter and data analyses.
- Electrical systems and architecture, diagnostics, fault codes, forward collision warning, lane departure warning, collision warning, autonomous braking/cruise control, tire pressure monitoring, blind spot detection.
- Fire cause and origin (chemical/electrical). Fuel systems.
- Diagnostic system and fault code analyses, audio/visual warning systems, fail safes, labels, vehicle/operator performance.
- Insurance Law, No Fault Insurance Law, Subrogation, Class Actions, NHTSA complaints & responses.
- Automotive OEMs, Customers, Suppliers, Manufacturing, Operations in domestic, European and Asian environments.
- Depositions, Expert Testimony, Trial Testimony, and Witness Preparation.
- Field Analysis of Product Liability Issues and the Implementation of Design Changes to continuously improve products.
- Support for development of Trial Strategies, Trial and Motion Practice, Dispute Resolution, Negotiation, and Settlement.
- All Aspects of Discovery and Disclosure Requirements, e-Discovery, Establishment of Discovery Policy and Strategy.
- Document Production and Accurate/Consistent Response Preparation.
- Pre-emption arguments, express, implied, or fact-specific analyses.
- Represent clients in all aspects of electrical, chemical, software methods/processes, computers, microprocessors, source code, programming, and controllers. Automotive components and systems. Safety systems, accident avoidance, telematics/telecommunications, mobile cellular information data transmission (transmitters/receivers), traffic/weather, communication protocols, radio optical satellite wireless mediums, GPS, navigation, monitoring & surveillance, security/tracking systems, camera/vision/optical systems, fleet management systems, Bluetooth, smartphones, truck, recreational, and commercial vehicle systems, construction/excavation, electrical/electronic, diagnostics, etc.