

# Mansour Ashtiani

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## Objective:

To apply for a position which could allow me to utilize my broad technical and managerial background as well as the variety of my expertise and tools that I have acquired in Innovation and problem solving and knowledge management tools and methodologies.

## Specialty skills:

**Project manager, Innovation Tools Manager, Development Engineer, Certified Structured Innovation Master, Certified TRIZ (Theory of Inventive Problem Solving) Specialist, Knowledge Enabled Innovation expert, Semantic Knowledge Expert, Chemical and polymer and material expertise, Team work and project management, Good communication skills, and a very positive attitude.**

**Project Manager** with diverse technical skills and experience in the automotive component development industry. Expertise in materials, innovation & problem solving, product & process development.

- Project Management & Technical Supervision
- Material , product, Process, manufacturing Development
- Intellectual Property Development
- Certified TRIZ (Theory of Inventive Problem Solving) specialist and Certified Innovation Master
- Initiated evolutionary technologies for the first time to automotive
  - TRIZ methodology and TRIZ software and deployment and teaching
  - Stereolithography for rapid prototyping and rapid tooling
  - Smart materials and Smart structure application

## Professional Experience

**Delphi Corporation, Powertrain PBU, Gas EMS Advanced Engineering Auburn Hills, MI (2005-2008)**

**Innovation Tools Manager** (Responsible for Powertrain and all other Delphi divisions worldwide)

- To champion, Introduce, promote and teach TRIZ as a Structured Innovation methodology and related software
  - Introduce, promote and teach TRIZ methodology and Goldfire software to engineers and managers
  - Conduct Structured Brain storming sessions using software and methodology for idea generation
  - Manage Invention Machine Goldfire account and assist 164 engineers with their software issues
  - Assist chief engineers and directors with their technology road mapping needs using Semantic search software and TRIZ methodologies.

**Delphi Corporation, Headquarter, Innovation & continuous Improvement Methodologies (2002-2005)**

*Innovation Tools Manager*

- Manage, promote and teach Innovation Tool “TechOptimizer” for entire corporation
- Manage the User group for the Structured Innovation software “TechOptimizer”
- Manage knowledge Management system and its manager and promote its semantic search capability usage
- Responsible for managing 164 users within Delphi
- Coach and consult on technical projects and usage of Innovation and knowledge management tools.

**Delphi Safety & Interiors as well as Delphi Thermal & Interiors 1985- 2002**

*Staff Engineer*

- Responsible for managing and developing new materials and process technologies for Delphi products including Steering, door panel, Instrument panel, airbag and seat.
- Submitted more than 180 records of inventions in various technologies for automotive interior products and processes.
- Received a boss Kettering award as well as 24 US patents and a number of trade secrets and 5 technical publications in the following areas:
  - Smart Speakers, vibration Damping Structures, airbags & seatbelt
  - Side impact technologies
  - Power sliding door
  - Rapid Prototyping and Tooling technologies
- Applied Semantic Knowledge-enabled software and TRIZ methodologies to a very difficult problem and solved it in 10 hrs which was solved by a group of engineers in a month.
- Managed a number of university research grant projects for developing various resins and substrates for composite materials as well as rapid prototyping process.
- One Boss Kettering award
  - As a result of developing an in-house Streolithography resin formulation, General Motors (GM) saved more than 5 millions dollars.
  - Developed resin chemistry for streolithography and sold the rights to an outside chemical company for cash reward to GM.
  - Developed an idea lab for the engineers and managers to gather for idea generation and out of the box thinking environment which was equipped with a number of innovation software for promoting structured innovation and problem solving.

**Polymer Institute, University of Detroit Mercy, 1983-1985**

*Research Assistant*

- Performed advanced research under the supervision of the world well known Professor Kurt C. Frisch in the area of advanced polyurethane chemistry for composites as well as elastomers and coatings
- Developed viscoelastic elastomer and foam materials for U.S. Navy with excellent results
- Developed Glass fiber reinforced Polyurethane foam composite to replace wood for freight liners application
- I received full scholarship for performing this research work.

**Education**

- Certified TRIZ specialist
- Certified Innovation Master for Structured Innovation software “TechOptimizer” from Invention Machine
- Master of science in chemical engineering with emphasis in polymer science from University of Detroit Mercy 1983-1985

- Worked for two years as research assistant at the Polymer Institute at the University of Detroit under the supervision for Professor Kurt C. Frish
- Bachelor of science in chemical engineering from Michigan State University, 1977-1981

### Languages

- Fluent in English and Persian (read, write and speak)

### Affiliations

- Current president and member of the board of the directors of the Altshuller Institute for the advancement of TRIZ methodology.
- Past secretary of the IFIP working group for the computer Aided Innovation.
- Member of the Delphi Innovation Hall of Fame.
- Member of the Altshuller Institute for the development of the TRIZ funds for TRIZ education for kids.

## **Mansour Ashtiani** - patents

Samples of the patents:

1. [Energy absorption system for vehicle door and method of making](#)  
US Pat. 4890877 - General Motors
2. [Rapid making of a prototype part or mold using stereolithography model](#)  
US Pat. 5616293 - General Motors Corporation
3. [Variable load limiting restraint retractor](#)  
US Pat. 6481659 - Delphi Technologies, Inc.
4. [Method and apparatus for vibration control](#)  
US Pat. 6454303 - Delphi Technologies, Inc., Active Control Experts,
5. [Molded in place antenna assembly and method of making same](#)  
US Pat. 6353415 - Delphi Technologies, Inc.
6. [Method for making an electrode for electrical discharge machining by use of ...](#)  
US Pat. 5728345 - General Motors Corporation
7. [Reinforced interior trim panel assembly and method](#)  
US Pat. 6475576 - Delphi Technologies, Inc.
8. [Apparatus and method for heating a steering wheel](#)  
US Pat. 6512202 - Delphi Technologies, Inc.
9. [Method and apparatus for air bag venting](#)  
US Pat. 6945559 - Delphi Technologies, Inc.
10. [Piezo integrated flat speakers for automotive interior panels](#)  
US Pat. 6639988 - Delphi Technologies, Inc.
11. [Over-molded beaded cable for driving applications](#)  
US Pat. 6849016 - Delphi Technologies, Inc.
12. [Over-molded beaded cable for driving applications](#)  
US Pat. 7294078 - Delphi Technologies, Inc.
13. [Apparatus and method for heating a steering wheel](#)  
US Pat. 6815642 - Delphi Technologies, Inc.
14. [Apparatus and method for interconnecting items with a flexible member](#)  
US Pat. 7331269 - Delphi Technologies, Inc.
15. [Damped steering assembly](#)  
US Pat. 9820382 - Delphi Technologies, Inc.
16. [Construction and process of all-plastic cables for power and manual driving ...](#)  
US Pat. 10143239 - Delphi Technologies, Inc.