DFP Training program

DAY 1.

1. **Introduction - Two DFP methodology directions:**

   - Designing new products/technologies, improving existing one with the possibility of patenting;
   - Working with the existing IP, circumventing, strengthening, developing firewalls, identifying ‘white spots’, etc.

2. **Intellectual Property in general. Patents in engineering:**

   - Patent application requirements:
     - Subject matter eligibility
     - Novelty
     - Non-obviousness (inventive step)
     - Usefulness

3. **Analytical Tools for DFP (devices):**

   - Component Analysis of device
   - Independent Claim decomposition:
     - Decomposition rules
     - Possibility of bringing in Supersystem components
   - Ghost components™. Examples of Ghost components™
   - Interaction Analysis, Interaction Matrix and its outcome
   - Device and Independent Claim function modeling – rules, recommendations, ranking

DAY 2.

1. **Tools for designing innovation strategies in innovation projects and competitive patents:**

   - Technology-Function Matrix
   - Function – X-parameter Diagram
   - “Value change for X-parameters” criteria (one of KPI)

CRIDO

DESIGN FOR PATENTABILITY

2. **Trimming as a DFP multi-purpose tool (for devices):**

- Rules of Trimming:
    - Rule selection
    - Recommendations for each rule
    - Partial Trimming
- Virtual Trimming:
    - Cases of Virtual Trimming
- Trimming applications for DFP:
    - Innovation scenarios building
    - Patent circumvention and patent KPI (Key Performance Indicators)
    - Patent strengthening

DAY 3.

1. **The Strategy of competitive patent circumvention by Trimming:**

- Specifics of function analysis for patent circumvention:
- Level of performance
- Ranking
    - Algorithm of competitive patent circumvention
    - Recommendations for trimming scenario selection
    - Partial Trimming for patent circumvention
    - Dragon Patents™ and how to deal with them

2. **Problem Solving tools for DFP. Function-Oriented Search (FOS):**

- Major concepts of FOS:
    - Expanding and the rules of expanding
    - Narrowing down to Leading Areas
- FOS algorithm
- Leading Areas and recommendations for selecting them.
- FOS applications: patent circumvention, alternative IP, technology chains.

3. **The Strategy of competitive patent circumvention by Substitution:**

- Strategies for selecting a component for substitution
- Issues with the Doctrine of Equivalents:
    - Non-literal infringement
    - Definition of an equivalent
- Using FOS to avoid patent infringement
- Substitution strategy and Prosecution History Estoppel

DAY 4.

1. **The Antidote Strategy for patent application strengthening:**

- Other side of competitive patent circumvention
- Using the strategy on patent applications
- Using the strategy on issued patents

2. **Problem Solving Tools for DFP. Resolving Technical (Engineering) Contradictions:**

- Trimming and Substitution engineering problems
- Types of engineering problem modeling and tools for processing the models
- Modeling engineering problems as Technical (Engineering) Contradictions:
    - IF-THEN-BUT format
    - Contradiction Matrix and Inventive Principles
    - Interpreting Inventive Principles into inventive ideas – using Inventive Principles for drafting the patent claims.

3. **Problem Solving Tools for DFP. Resolving Physical Contradictions:**

- Modeling an engineering problem as a Physical Contradiction
- Algorithm for resolving Physical Contradictions:
    - Separating contradictory demands
    - Satisfying contradictory demands
    - Bypassing contradictory demands
- Using FOS for resolving Physical Contradictions

DAY 5.

1. **Attribute Analysis for competitive patent circumvention:**

- Attribute Analysis of the claim components
- Attribute types:
    - conditions
    - state
    - time
    - location and positions
    - mobility
    - direction
- Conversion of the Attributes
- Resolving Attribute problems as contradiction or/and function models

2. **Introduction to Innovative Hybridization:**

- Hybridization Approach and “non-obviousness”/inventive step:
- Innovative Hybridization and Entrepreneurship

3. **Preview of L2 Certification Workshop:**

- Circumvention of patents on processes (methods)
- Picket Fence Strategy
- Development of the dependent claims
- Development of patent firewalls and Cause-Effect Chain Analysis
- New DFP problem solving tools
- Trends of Engineering System Evolution (part A) and using them for developing dependent claims

4. **Official DFP-1 Certification Test**

On graduation of DFP-1 certification program the participants will learn basic DFP tools that will enable them

- run innovation projects ending up with patentable solution
- circumvent competitive patent
- successfully complete innovation projects on cost reduction and simplification
- find the necessary innovative technology
- develop innovation strategies for products
- perform hybridization of products ending with effective patentable engineering solution
- strengthen their own IP

On passing the Official Certification Test the participants will get DFP International certification of Level 1 DFP Practitioner