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TRIZ REVERSE

A systematic approach to exploit the economic potential of patents

M.A. Silvia L. Popova

Research Associate, HTW Dresden/ Germany
Technology Transfer & Innovation Management

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TRANSFER_i

Overview

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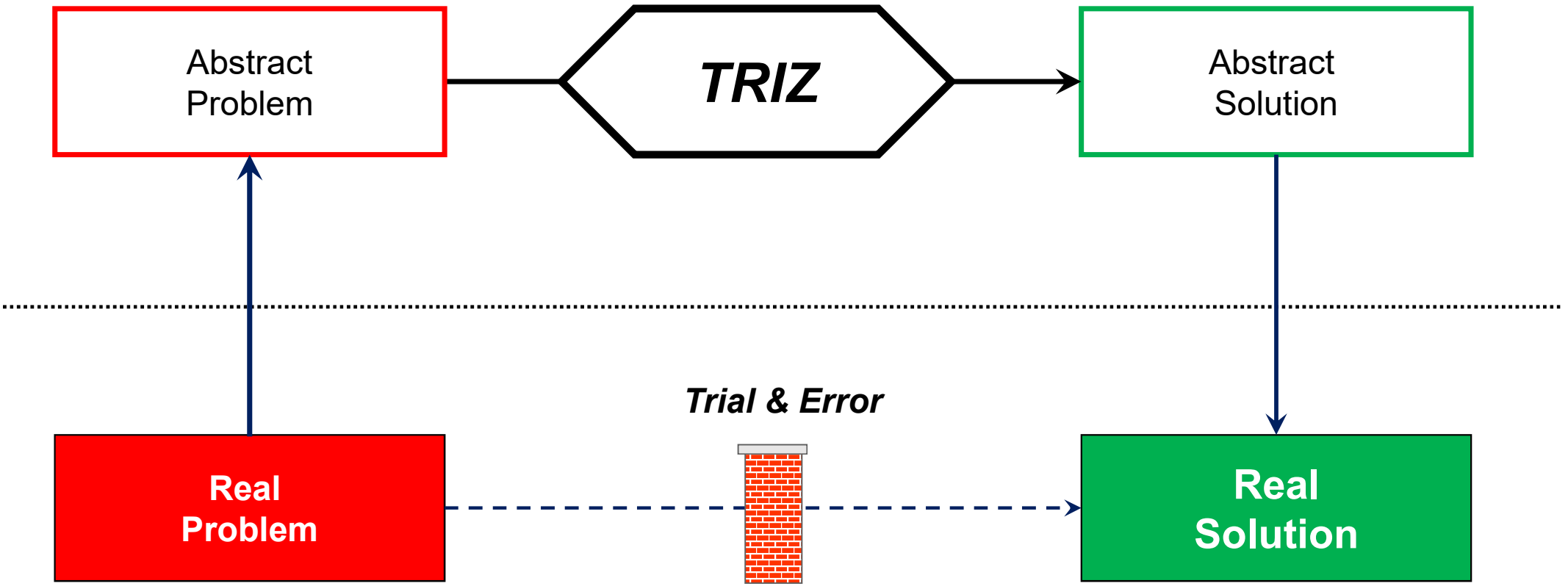
- **TRIZ Matrix = Foundation**
  developed by G.S. Altshuller
- Inventive Principles based on analysis of more than 2.5 Mio. Patents
- TRIZ … Theorija Reshenija Izobretatjelskich Zadacz
- TIPS … Theory of Inventive Problem Solving

parameter to be improved	undesired change (conflict) →	1 (1) Weight of a moving object	2 (2) Weight of a stationary object	3 (3) Length of a moving object	4 (4) Length of a stationary object
1	(1) Weight of a moving object			15, 8, 29, 34	
2	(2) Weight of a stationary object				10, 1, 29, 35
3	(3) Length of a moving object	8, 15, 29, 34			
4	(4) Length of a stationary object		35, 28, 40, 29		

TRIZ Approach



From Invention to Innovation

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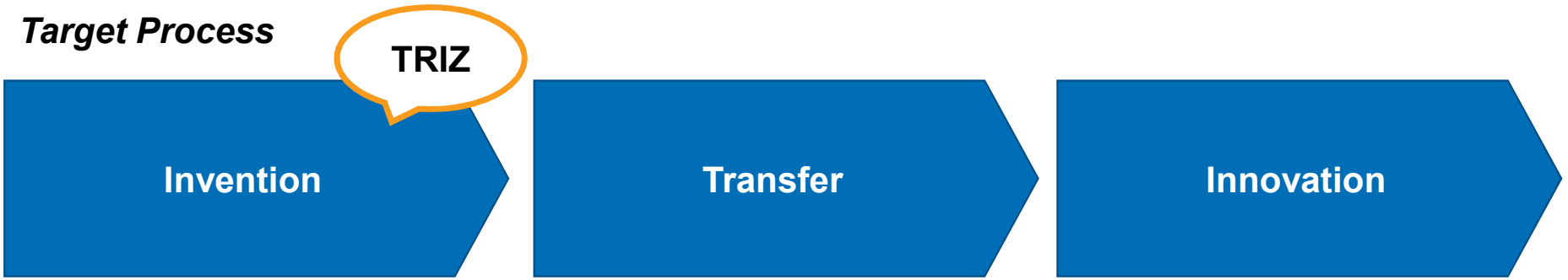

TRIZ Reverse Approach

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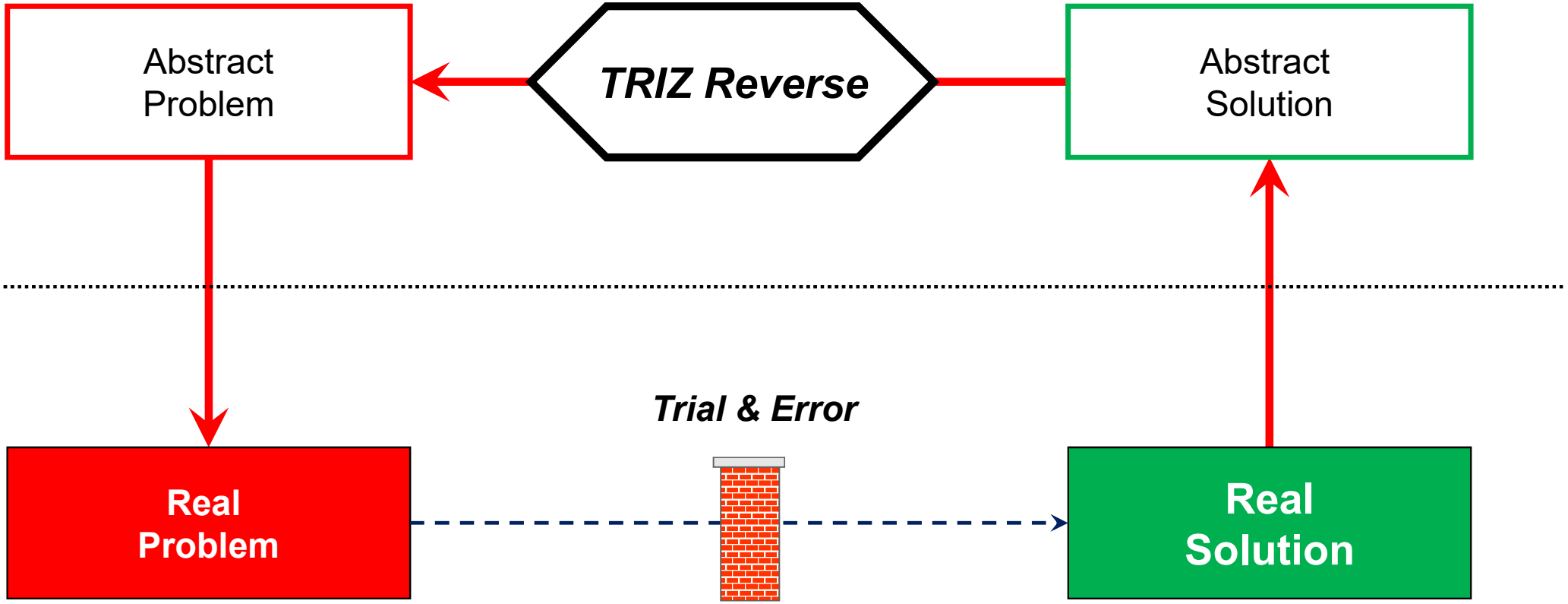

Fields of Application

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TRIZ Reverse

1. **New Markets** – Identification of potential customers and new fields of application of intellectual property

2. **Additional Strengths** – Exploration of USPs of a given patent and market positioning

3. **Potential Competitors** – Identification of similar patents from other fields/ industires

7 Steps of TRIZ Reverse

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by HTW Dresden

- Step 1: **Selection** of a suitable invention (patent)
- Step 2: **Patent analysis** and identification of relevant inventive principles
- Step 3: Keyword selection and **Search code generation**
- Step 4: **Database research** (search code test)
- Step 5: **Patent list analysis**, semi-automatic
- Step 6: Manual patent list analysis (3 steps)
- Step 7: **Patent exploitation options/** Discussion of possible cooperation

* Further information available in 2022 UIIN Conference Series Proceedings

Testimonies

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"We think that TRIZ Reverse helps to structure and categorize an inventive idea to support the identification of potential applications that were not considered initially."

Dr. Lucas Wetzel & Dr. Dimitris Prousalis

Max-Planck-Institute for the Physics of Complex Systems (Dresden, Germany)

"The TRIZ Reverse method generates numerous surprising fields of application, some of which are only indirectly related to the specific innovation solution, but can therefore provide completely new development directions."

Mathias Kott

Fraunhofer Institute for Process Engineering and Packaging IVV (Dresden, Germany)

Transferred Technology
Case Study: “Collagen based layer material”

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Patent: "Biocompatible molded part and method for producing a collagen-based layered material"

DE102017123891

Prof. Dr. Kathrin Harre/ Daniel Firzlaff/ Tobias Pietzsch/ Prof. Dr. Edda Tobiasch

Originally developed and designed for Medical Sector

Step 5a - Analysis of IPC Codes

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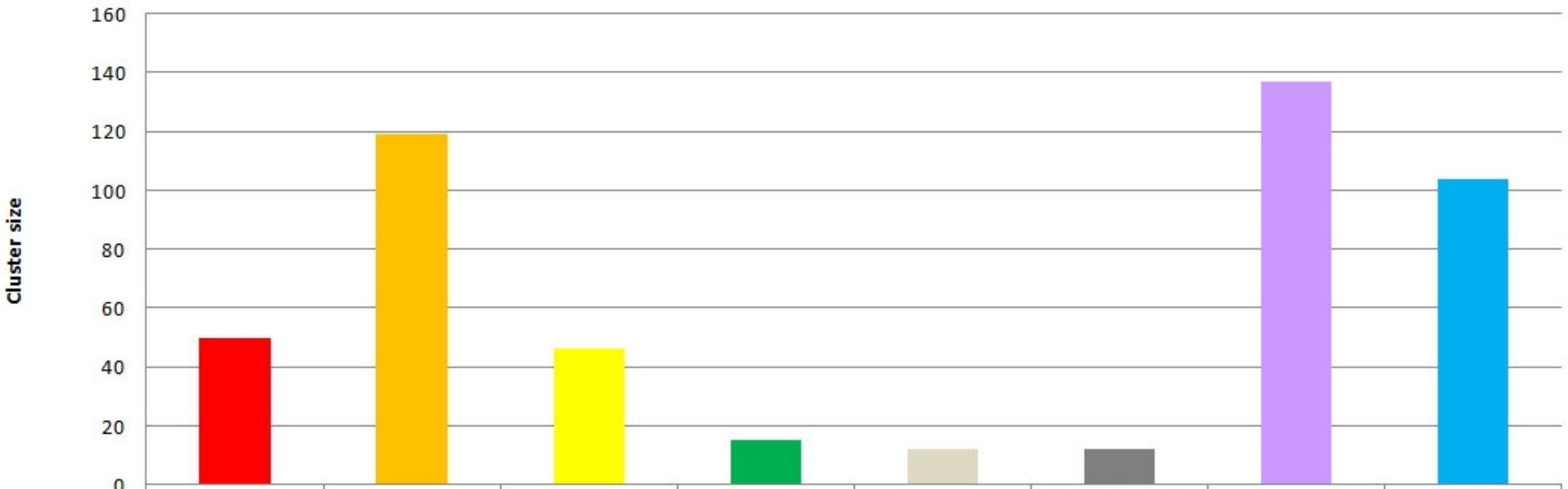
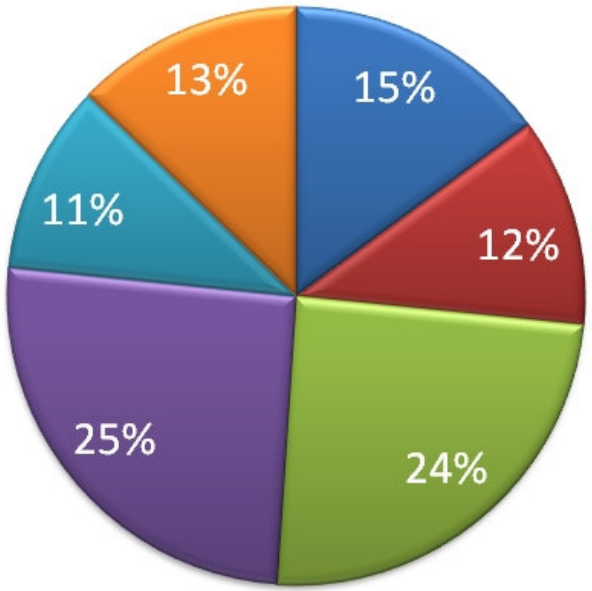
Sections - Statistical Distribution



	A - HUMAN NECESSITIES	B - PERFORMING OPERATIONS; TRANSPORTING	C - CHEMISTRY; METALLURGY	D - TEXTILES; PAPER	E - FIXED CONSTRUCTIONS	F - MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING	G - PHYSICS	H - ELECTRICITY
Cluster size	50	119	46	15	12	12	137	104

Step 5b - Analysis of Section B



- Separation; Mixing;_Physical or chemical processes or devices in general
- Processing of plastics; Processing of materials in a plastic state in general
- Layered body
- Pressing; lining machines; typewriters; stamp [4]
- Decorative art or decorative technique
- Conveyance; Packaging; Storage; Handling thin or filamentary materials

PACKAGING INDUSTRY

Prototyping Idea
“Fast Consumer Goods”

Sustainable collagen based packaging for shampoo bar

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Tangible prototype for a shampoo bar as a multi pack solution – Designed and produced by J. Alex & J. Haustein, HTW Dresden

Network & Partners

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futureSAX
Idee. Transfer. Innovation.

Fraunhofer IVV

mpipks
Max-Planck-Institute

P&G

white ip group

Matabooks

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