

Matrix 2003

40 Inventive Principles

- 1 Segmentation
- 2 Taking Away
- 3 Local Conditions
- 4 Asymmetry
- 5 Mergings
- 6 Multi-Functionality
- 7 Nesting
- 8 Weight Compensation
- 9 Prior Contradiction
- 10 Prior Action
- 11 Beforehand Compensation
- 12 Equipotentiality
- 13 The Other Way Round
- 14 Curvature Increase
- 15 Dynamics, Adjustability
- 16 Partial, Overdone or Excessive Action
- 17 Transition into New Dimension
- 18 Vibration
- 19 Periodic Action
- 20 Continuity of Useful Action
- 21 Rushing Through
- 22 Convert Harm into Benefit
- 23 Feedback
- 24 Mediator
- 25 Self Service
- 26 Copying
- 27 Cheap Short-Living Objects
- 28 Replace Mechanical System with Fields
- 29 Fluid System
- 30 Flexible Film or Thin Membranes
- 31 Porous Materials
- 32 Optical Property Changes
- 33 Homogeneity
- 34 Reflection and Repetition
- 35 Changing Properties
- 36 Phase Transition
- 37 Thermal Expansion
- 38 Use Strong Outdoors
- 39 Insert Environment
- 40 Composite Materials

Inventive Principle	Physical										Performance										Efficiency										Iliity										Manufacture/Cost										Measure
	Weight of Moving Object	Weight of Stationary Object	Length/Angle of Moving Object	Length/Angle of Stationary Object	Area of Moving Object	Area of Stationary Object	Volume of Moving Object	Volume of Stationary Object	Speed	Force	Energy	Power	Strength	Stiffness	Temperature	Humidity	Pressure	Productivity	Accuracy	Loss of Time	Loss of Energy	Loss of Materials	Loss of Information	Reliability	Flexibility	Stability	Security	Health	Comfort	Convenience	Usability	Cost of Production	Cost of Operation	Cost of Maintenance	Cost of Disposal	Environmental Impact	Life Cycle														
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48			