

SUMMARY OF FORMULATION LOGIC FOR AATRIZINVENTOR SOLUTION

Work Paper

If you applied summary or abbreviated descriptions, have them available to review this logic.

Objective of the Innovation Challenge

Improve Removal of the locking pin from the male-female parts of the locking mechanism affected by the locking and rubbing between the pin and the male-female parts

Evaluated Object S1

LOCKING PIN - Type: Moving

Object S2 interacting with S1

MALE-FEMALE PARTS OF CLOSING MECHANISM - Type: Stationary

Physical Variable or Characteristic

Extraction certainty

the undesirable

With Less Extraction certainty there is undesirable effects, then there is More difficulty to :

Improve Removal of the locking pin from the male-female parts of the locking mechanism affected by the locking and rubbing between the pin and the male-female parts

the desirable

With More Extraction certainty there is desirable effect, then there is More ease to :

Improve Removal of the locking pin from the male-female parts of the locking mechanism affected by the locking and rubbing between the pin and the male-female parts

TRIZ Innovation Parameters Evaluated

TRIZ Innovation Parameters	Undesirable Effect (UDE)/ Desirable Effect (DE)	Evaluate
3. Length of moving object	<p>LOCKING PIN : There is More difficulty to Improve Removal of the locking pin from the male-female parts of the locking mechanism affected by the locking and rubbing between the pin and the male-female parts because there is More Length of interaction with the male-female parts</p> <p>Effect : undesirable</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Area of moving object	<p>LOCKING PIN : There is More difficulty to Improve Removal of the locking pin from the male-female parts of the locking mechanism affected by the locking and rubbing between the pin and the male-female parts because there is More Area of interaction with the male-female parts</p> <p>Effect : undesirable</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
9. Speed	<p>LOCKING PIN : There is More difficulty to Improve Removal of the locking pin from the male-female parts of the locking mechanism affected by the locking and rubbing between the pin and the male-female parts because there is Less Extraction speed regarding the male-female parts</p> <p>Effect : undesirable</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
10. Force/ Intensity	<p>LOCKING PIN : There is More difficulty to Improve Removal of the locking pin from the male-female parts of the locking mechanism affected by the locking and rubbing between the pin and the male-female parts because there is Less Extraction force affected by obstruction with male-female parts</p> <p>Effect : undesirable</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
12. Shape / composition / configuration	<p>LOCKING PIN : There is More difficulty to Improve Removal of the locking pin from the male-female parts of the locking mechanism affected by the locking and rubbing between the pin and the male-female parts because there is Less Appropriate form for extraction from male-female parts</p> <p>Effect : undesirable</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No

TRIZ Innovation Parameters	Undesirable Effect (UDE)/ Desirable Effect (DE)	Evaluate
14. Strength / Resistance	<p>LOCKING PIN : There is More difficulty to Improve Removal of the locking pin from the male-female parts of the locking mechanism affected by the locking and rubbing between the pin and the male-female parts because there is Less Extraction strength affected by obstruction with male-female parts</p> <p>Effect : undesirable</p>	<input data-bbox="1360 218 1471 302" type="checkbox"/> Yes <input data-bbox="1360 306 1471 390" type="checkbox"/> No
35. Adaptability or versatility	<p>LOCKING PIN : There is More difficulty to Improve Removal of the locking pin from the male-female parts of the locking mechanism affected by the locking and rubbing between the pin and the male-female parts because there is Less Adaptability to variability of male-female parts obstructions</p> <p>Effect : undesirable</p>	<input data-bbox="1360 596 1471 680" type="checkbox"/> Yes <input data-bbox="1360 684 1471 768" type="checkbox"/> No
34. Ease of change, repair or maintain	<p>LOCKING PIN : There is More ease to Improve Removal of the locking pin from the male-female parts of the locking mechanism affected by the locking and rubbing between the pin and the male-female parts because there is More Ease of change extraction conditions</p> <p>Effect : desirable</p>	<input data-bbox="1360 968 1471 1052" type="checkbox"/> Yes <input data-bbox="1360 1056 1471 1140" type="checkbox"/> No