ε1.3 Patent Summary Sheet

Instructions

In your engineering notebook or on this form, document each patent you find related to the major project problem you have identified. Your instructor may want you to print or partially print the related patent.

Source (APA format):

https://patents.google.com/patent/KR101083293B1/en?q=(screw+sorting)&oq=screw+sortin

유필상나승우. (2011). Screw sorting device (South Korea 101083293B1). Korean Intellectual Property Office. https://patents.google.com/patent/KR101083293B1/en

Patent Number:

KR101083293B1

Patent Summary:

Summarize the patent in your own words. Highlight the key pieces of information, including features and benefits.

The System uses a hopper that feeds into a vibrating bowl feeder to sperate screws into different holders along a track. Then it uses image analysis technology to determine if the screw is defective and needs to be removed. This technology allows for the machine to identify and remove screws that don't meet quality standards and would not be usable.

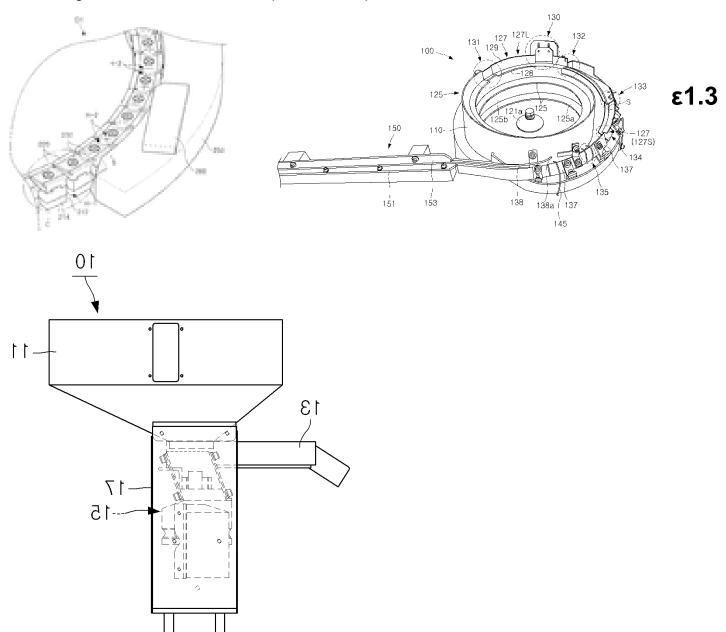
Patent Critique:

How does the patented item solve or attempt to solve your problem or a similar one? What are some good and bad attributes of the item? What unique aspect does the patent add to your overall research?

The item solves a similar problem in that it sorts screws. However, it appears to be quite slow, but this is to be expected because it sorts by quality, which is hard to check for. It does have an efficient and simple hopper into track system that makes interacting with an individual screw much more manageable. A similar system can possibly used on our own design, as it would let use separate screws for sorting to ensure screws don't get incorrectly placed.

Images/sketches:

Attach images or sketches related to the patent that help describe the solution.



Patent Summary Sheet

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Source (APA format):

Qualicaps Co Ltd. (2008). Apparatus for transferring a subject to be inspected and appearance inspecting apparatus(Europe 2159569B1). European Patent Office. https://patents.google.com/patent/EP2159569B1/en

Patent Number:

EP2159569B1

Patent Summary:

Summarize the patent in your own words. Highlight the key pieces of information, including features and benefits.

The design uses a set of rollers to carry a set of assorted items down a path where they can be controlled to take images and analyze the items. The rollers rotate the items as they pass along, and the design utilizes image processing to collect data about the items. This allows for many items to be analyzed starting from a disordered state moving into an orderly one.

Patent Critique:

How does the patented item solve or attempt to solve your problem or a similar one? What are some good and bad attributes of the item? What unique aspect does the patent add to your overall research?

The way the items are passed through and inspected could be useful in our design as well. The way it processes several items at once makes it very efficient, although deformities make the rollers bounce the items, which is an issue they mention.

Images/sketches:

Attach images or sketches related to the patent that help describe the solution.

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