Starch Based Materials

This technology consists of materials (mostly films) made with polymers containing starch and methods of making them. The main benefits are the starch components are biodegradable and renewable. By 2020 the total global biodegradable plastics market is estimated at $3.4 billion. This market shows a high growth rate and longevity. [Source: Biodegradable Plastics (PLA, PHA, PBS, Starch Based Plastics, Regenerated Cellulose & PCL) Market-Global Trends and Forecasts to 2019 from Research Markets.]

K-C developed starch based polymer technology to make components of personal care products biodegradable, however the possible uses are endless.

Potential Applications

- 3D Printing
- Packaging
- Personal Care Products
- Injection molded plastics

Key Advantages

- This technology can be produced using standard machinery.
- The production of these inventive films can reduce energy input and green house gas emission.
- This technology creates cost-advantaged compositions and commercial scale processes to produce biodegradable personal care products.

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Forward Citation List by Number of Patents

P&G (8), Biofiba Innovations (2), Industrial Technology Research Institute (2), Saudi Basic Industries Corp (2), Avery Dennison (1), Tristano (1), MABEL PLAST (1), Green Dot Holdings (1)

This visualization provides information on the companies that have patents in classifications similar to the offered IP estate. The bubble graph is essentially a 3-axis map, with the size of the bubble relating to the number of patents the company has that are similar to the offered patents. The x-axis position is related to IP Vision in this landscape. The y-axis position is related to the Resources the firm can direct to this IP area.

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## Patent Offering

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<th>US Publication / Patent Number</th>
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<td>7998888</td>
<td>Thermoplastic Starch for use in Melt-Extruded Substrates</td>
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<td>Method For Forming A Thermoplastic Composition That Contains A Plasticized Starch Polymer</td>
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