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Here are five biomimicry creations inspired by nature, along with the inventors, their sources of inspiration, and the present status of the technologies:

### 1. Velcro (Hook-and-loop fasteners):

- Inventor: George de Mestral
- Inspiration: While hiking, George de Mestral observed how burrs attached to his dog's fur and his own clothing. He studied the burrs under a microscope and noticed their hook-like structures.
- Present Status: Velcro has become a widely used fastening technology, finding applications in clothing, footwear, medical devices, and more. It remains a popular example of biomimicry, revolutionizing the way things are fastened together.

### 2. Shinkansen Bullet Train (Inspired by Kingfisher):

- Inventor: Eiji Nakatsu
- Inspiration: Eiji Nakatsu was inspired by the beak of a kingfisher bird, which allowed the bird to dive into water with minimal splashing. Nakatsu applied this concept to the design of the Shinkansen's front-end, reducing noise and energy consumption.
- Present Status: The Shinkansen, also known as the Bullet Train, is an iconic high-speed rail system in Japan. The train's design has contributed to its efficiency, speed, and minimal impact on the environment.

### 3. Lotus Effect Coatings:

- Inventor: Wilhelm Barthlott and Christoph Neinhuis

- Inspiration: The lotus leaf's ability to repel water and self-clean due to its micro- and nano-scale surface structure inspired researchers to develop superhydrophobic coatings.

- Present Status: Lotus effect coatings have been applied to various surfaces, from building materials to textiles. These coatings prevent dirt, water, and other substances from adhering, leading to self-cleaning surfaces and reduced maintenance requirements.

#### 4. Bullet Train Nose Shape (Inspired by Birds and Fish):

- Inventor: Dr. Shinji Sogo

- Inspiration: Dr. Shinji Sogo drew inspiration from the streamlined shapes of birds and fish while designing the nose of the bullet train. These shapes reduce air resistance and increase speed efficiency.

- Present Status: The innovative nose shape design has contributed to the high-speed performance of modern trains, enhancing their aerodynamics and energy efficiency.

#### 5. Wind Turbine Blade Design (Inspired by Humpback Whale Flippers):

- Inventor: WhalePower Corporation

- Inspiration: The bumpy leading edge of humpback whale flippers led researchers to develop a unique blade design for wind turbines. These bumps help reduce turbulence and improve lift-to-drag ratios.

- Present Status: The innovative blade design has shown potential to increase the efficiency of wind turbines, resulting in improved energy generation and reduced operational costs.