***Inventor Profile***

Today, everyone depends on their smart phones to make our lives more convenient. We all love using our cell phones to make and receive phone calls, to send text messages, and to search the Internet and get directions wherever we go. Our phones are invaluable tools when working away from our offices and when wanting to be entertained. Our phones are powered with rechargeable batteries, which must be re-charged frequently by being plugged into an electrical outlet. If the user forgets to recharge the phone, he or she soon discovers they are unable to use the device for communication, Internet searches, or entertainment. They are unable to pull up a mobile boarding pass when traveling and may miss an important call from a spouse or boss. Being a creative problem solver, Omni Crenshaw has designed a new way to charge smart phones, so the owners will no longer be tethered to electric outlets, waiting to use their phones. This charger will keep up with their busy lifestyles, as they will be able to charge their phones while on the go.

Mr. Crenshaw has teamed up for the development of this project with Idea Design Studio, and together they have used their collaborative experience to transform this idea into a marketable platform. The inventor passionately feels a sense of pride about this concept and believes that it deserves immediate attention. Because of the great market that exists for such a concept, he wholeheartedly believes in the positive impact its development and production will have on individuals and the market(s) to which it will be promoted.

***What is the Concept?***

The name of the concept the inventor has chosen is **Shake Charger,** although he is open to the possibility of a name change and reserves final approval regarding the official name. Branding is important, of course, but the concept is the official foundation for the invention and any forthcoming applications of the invention.

The concept Mr. Crenshaw has envisioned is a mechanically powered charge that produces a current from magnets being moved through specific components. It requires no outside power source, other than the action of being shaken. A further, more detailed explanation of the functionality of this invention will be elaborated upon in the following segment.

***How Does it Work?***

Mr. Crenshaw has been designing and documenting this concept for quite some time. He has several “mock-up” drawings of the product, which have provided the inventor with a sense of how the concept will appear once brought into production. This is beneficial for making any necessary modifications and revisions for improvements; thus promoting a more satisfactory and overall accommodating product.

As currently designed in the technical drawings and 3-D models, the invention has unique features not presently available in the marketplace. Although the system has not yet been engineered and is still in the 3-D developmental stages, an explanation of possible functionality is as follows:

The **Shake Charger** uses power created by the vibration of several magnetic cells, which each produce a small current, but produce enough power to charge a mobile device when joined together. This array of magnetic cells stores the energy temporarily in capacitors until a wireless micro-USB connector is plugged into the cell through one of the four sides of the **Shake Charger** case. This provides a way to transfer the power from the capacitors to the battery of a cell phone or other electronic device. When there is no power source available, users will be able to create enough power to keep a phone working by just shaking the phone in its shake case. The shake case consists of several suspended magnets, arranged in a specified pattern of positive and negative arrays with copper coils. There are slits on all four sides to insert the connector needed to transfer the power generated by the **Shake Charger** to a cell phone’s battery, so the same connector can be used to access a charger port on all makes and model of cell phones. The **Shake Charger** can be modified to fit the shape of any device that needs charging. It may also be available as a separate device, which would be more affordable. This would resemble a standard charger, but would not need to be plugged into an electric outlet in order to charge a phone. It would just need to be shaken, and the power would be transferred to the cell phone battery through its charging cord. Ideally, the **Shake Charger** will work best as a device to prevent a phone from going dead. While the phone is resting in the shake case, an occasional shake will provide enough power to keep it from dying.

***What Problem(s) Does it Solve?***

The unique features of this product will provide the following benefits for consumers everywhere:

* A new way to charge a cell phone or any mobile device without needing to plug it into an external power source
* Eliminates the need for cables, plugs, electric outlets, and extra batteries to charge a phone while on the go
* Will be used to keep phones from dying, and it will provide the power needed to revive a dead phone
* The power to charge a phone’s battery can be created within a few seconds by shaking the case with the phone attached; however, it may take longer to charge the phone’s battery if it is completely dead
* Provides an ideal way to keep a phone working, so users never have to worry about their phones dying while they are away from home
* An environmentally-friendly way to charge a phone without relying on fossil fuels or using any natural resources

Possible Material(s) for Construction

The cost of materials and actual materials used will depend on the quantity manufactured and the buyer/licensee of this idea. An introductory retail price and sustaining price will be determined by the quantity manufactured, the actual cost of manufacturing, advertising methods used, and packaging materials employed by the buyer/licensee. The inventor understands that company feedback, especially from knowledgeable sources, is a great way to improve the product for future market potential.

***Marketing***

Mr. Crenshaw envisions his product appealing to multitudes of consumers who are dependent on their phones and want to avoid being stranded with a dead phone. Today’s society is always seeking new ways to be sure our devices are enhancing our lives, rather than creating new problems and stress. This is precisely why this product has been developed. This allows users to live confidently, knowing they will be able to recharge their phones whenever they need to, without having to carry a bulky charger or search for an electric outlet wherever they go.

The markets are extensive for an innovative product like the **Shake Charger,** as consumers everywhere will appreciate the benefits and convenience of using this product. It would be retailed wherever electronic and portable devices are sold, including business supply stores, like **Staples** and **Office Depot**, general supply stores, like **Wal-Mart** and **Target**, stores specializing in the sale of electronic, like **Best Buy** and **Radio Shack**, as well as company stores selling their products, including **T-Mobile**, **Verizon**, and **AT&T**. The Internet provides an additional platform for the advertising and marketing of this innovative product with many retail sites as well as sites for informative videos.

Mr. Crenshaw wishes to leave the market open for subsequent variances and possibilities that could improve the feasibility and marketability of this product.