



FACT TECHNOLOGY™

an explanation of exactly how this new technology works
to enhance smile aesthetics and to promote oral health

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Power Swabs Corporation • 14525 SW Millikan Way, ECM #51006 • Beaverton, OR 97005

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Introduction

Dentists and dental hygienists have always encouraged their patients to avoid the pursuit of an overly white smile. This is because they know that the dentin, found at the core of all human teeth, is actually colored yellow, as can be seen in the figure below. Additionally they understand that healthy enamel is only 2-3 mm thick, and is optically translucent such that some yellowness of the underlying dentin always shines through (1).



Thus, until recently, dental professionals have traditionally believed that their patient's desires to attain a high magnitude of tooth "whiteness" to be a benign cosmetic pursuit at best. At worst, this can become an ignorant obsession that is a total misunderstanding of the

biological structure of teeth; it is completely not how natural, healthy teeth are supposed to look. Pure white opaque teeth look lifeless and false.

However it seems that the recently growing media trend, depicting models, actors and other so-called "beautiful people" with digitally enhanced, paper white teeth has had a great influence on consumer perceptions, and these have superseded professional recommendations for moderation. As a result, in order to keep pace with patient demand, and with the competitive nature of the business of "dental practice," many dental professionals have acquiesced and refocused their practices to address the need for increased oral aesthetics.

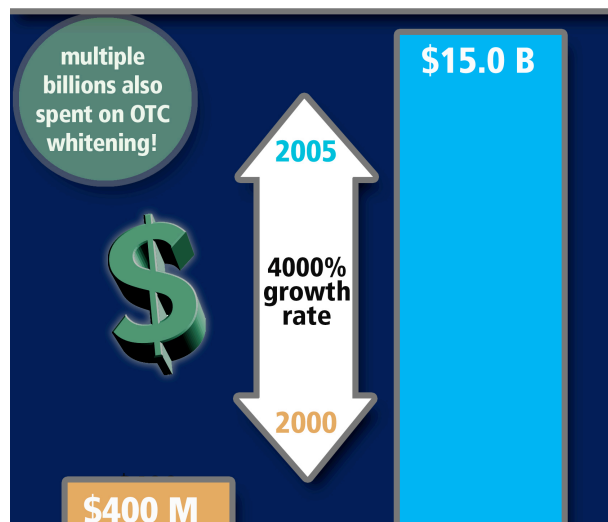
To be sure, it has always been known that a smile is one of the first things we notice about a person. For many of us, it is the first trigger of that all-important first impression – the emotional compass that guides all further interactions between personalities. From the Mona Lisa to the latest supermodel to a new acquaintance, our global culture places a great emphasis on the qualities of the individual smile. Therefore it is no wonder that the recent availability over-the-counter tooth whitening agents, along with their accompanying intense TV and print marketing campaigns, have driven Americans into a tooth whitening frenzy.

The Whitening Boom

Consequently, much of the practice of dentistry has changed drastically during this new millennium to match the mounting focus on smile whiteness. In fact, the "smile boom" has caused a large flow of capital

spending through consumer channels as well as for procedures completed in the dental office. As evidence, it has been reported that in 2005, US consumers alone spent over \$2 billion (2,3) on over-the-counter tooth whitening preparations and another \$2 billion dollars (4) on multipurpose whitening toothpastes, and this amount has likely grown since then. But even those sales numbers pale compared with the demand for professional whitening and cosmetic dental procedures, which have soared from about \$400 million in 2000 to \$15 billion (5) or more just five years later as depicted above.

ANNUAL \$USD SPENT ON PROFESSIONAL COSMETIC & WHITENING PROCEDURES




In fact, even beyond the USA, this cultural attribute now drives the oral care business in much of the world. There can be no doubt that consumers care about their smiles to an extreme degree, and they are apparently willing to spend a great deal of money to make the right first impression in any business or social situation. Consequently, the business of oral care products has now found itself at the crossroads of the cosmetics, chemical and dental industries.

The Fleeting Illusion of White

But, an irony “colors” this amazing cultural focus on whitening in oral care. It turns out that dental professionals have been quite right to be concerned about overall dental health, rather than oral aesthetics, considering the poor quality of current art tooth bleaching preparations. It might be quite surprising for most of us to know that the vast majority of “whitening” oral care products, attracting billions of dollars in consumer spending, do not effectively clean teeth, nor are they designed to remove any subsurface dental stains. Even dentist-applied whitening treatments deliver whitening results that disappoint within a matter of days. Worse, they cause dentinal pain in more than two thirds of patients who undergo treatment (6).

REALITY CHECK: RESULTS OF MODERN TOOTH BLEACHING



Bleach + Thickener + Acid =

- Surface Etching
- Surface Dehydration
- Opaque Unnatural Appearance
- Dentinal Hypersensitivity
- No Stain Removal
- Works Very Slowly
- Temporarily Masks Dentin and Stains

Healthy enamel is translucent and is not false opaque bright white

BENEFITS OF TRANSLUCENT CLEAN TEETH ENAMEL



As White As Teeth Can Naturally Be

- Healthy
- Sustainable
- Achieved Rapidly
- Natural Appearance
- Stain Free
- No Sensitivity

There are several reasons why tooth stains re-emerge so quickly. One cause is that bleach, in general, is not designed to remove colored

molecules from stained surfaces. Instead it works only to temporarily lighten some organic surface stains. Another reason for the fleeting results delivered by existing products is that they also work by temporarily “masking” the subsurface discolorations by changing the optical properties of the enamel (from translucent to opaque), largely through a process of enamel dehydration and / or acid etching (7,8).

In essence, anyone who has sought to whiten their teeth in the past, through any means, have really only paid for a likely painful, fleeting illusion of whiteness without having addressed the true root of the problem. The surface and subsurface stains still remain, although covered-up well, immediately after bleaching therapies have concluded. Not surprisingly, over time, dentists and hygienists are beginning to realize that the treatments that they have been applying to their patients’ teeth at high fees, are at best, only partially effective, with absolutely no health benefit. Still worse, they are finding that the have helped to cause a transient, mild to moderate, dentinal hypersensitivity reaction in a majority of those who have sought their help.

Sadly, even with this realization, and an ever increasing demand for better whitening products, the chemistry of tooth whitening products have not changed fundamentally since they were introduced in 1993. Professionals and consumers have few real choices, as the vast majority of present day teeth whitening preparations are still based on an anhydrous peroxide chemistry being carried onto teeth via an acidic thickened gel, for relatively long periods of time, to slowly lighten some organic surface tooth stains.

Introducing a New Paradigm

However there is a silver lining. The art and science of “teeth cleaning and whitening” are about to take a dramatic leap forward. The Power Swabs Corporation has recently developed a proprietary and multiple patent-pending method of cleaning and whitening teeth through a completely new paradigm. It is a method derived from its deep and broad experience in the practice of dentistry, oral care products and household products formulation.

Further, it is a technology that represents the world's first safely ingestible "tooth detergent" that carries the properties of extreme, rapid, surface / subsurface, non-abrasive and safe, true stain removal. This highly desirable activity is achieved while avoiding bleach and the acidified thickened gels that typically contain them. Instead, The Power Swabs Corporation has taken a completely new approach that actually removes all kinds of surface and subsurface tooth stains (not just the organic double-bonded ones). The new technology also is inherently pain free and can even be used to virtually eliminate the transient dentinal hypersensitivity associated with "tooth bleaching" treatments when used pre-procedurally.

To better understand the true "disruptive" nature of the technology, a background discussion on the chemistry of peroxide-based tooth whiteners will be discussed first, followed by an in-depth overview of the Power Swabs FACT Technology™.

Understanding the Problem

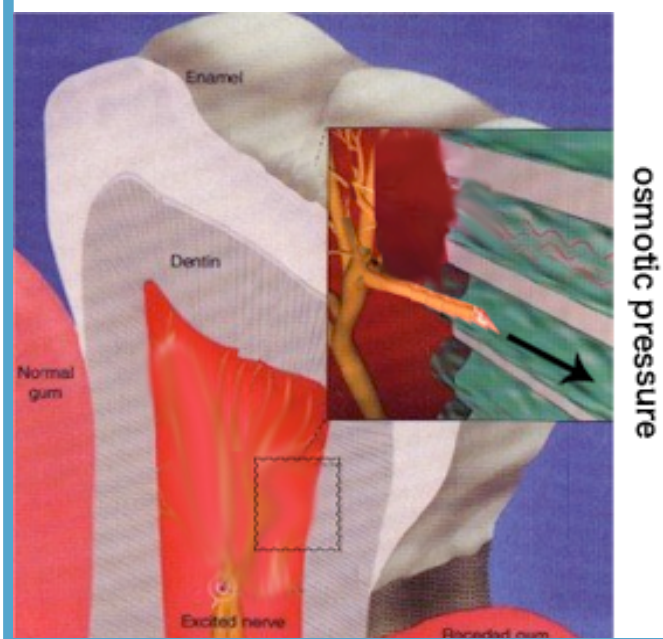
Today many over-the-counter brands and delivery systems for "whitening" oral care products are available to consumers, but they are all surprisingly similar in many aspects. They all claim to whiten teeth within a certain similar range of Vita™ shades. Additionally, they all tend to be cumbersome to apply, and require great amounts of compliance (typically over weeks or months) in order to achieve even modest results.

This is true for professionally dispensed or administered treatments as well. All are relatively time consuming, requiring at least hours, if not weeks, of therapy to achieve desired results. Of greatest concern is that regardless if OTC or professional, they all share major negative attributes: 1) inability to remove tooth stains; 2) frequently cause transient tooth pain; and 3) initiator of enamel dehydration and etching leading to significant color rebound within seven days of concluding treatment (7). Unfortunately for all, current methods of tooth bleaching has only resulted in a lot of money being spent at the dental office, or local pharmacy, yielding poor or fleeting results and no stains were ever actually removed.

It has been speculated in the dental literature that the tooth pain associated with bleaching procedures, occurs in more than two-thirds of patients undergoing bleaching treatment. The medical term for this condition is "transient dentinal hypersensitivity"(8,9). However in layman's terms, this simply means that most patients find these treatments painful. The nature of the pain has been described as a multi-faceted transient thermal and tactile sensitivity that occurs both during application, and lasting for 2 to 14 days beyond the end of treatment (8).

The exact etiology of this pain is not fully known, however the literature describes a "Hydrodynamic Theory" (10) that can be considered to be a reasonable template for understanding. The theory essentially explains that hypersensitivity is most probably caused by the dehydration (11) of tooth enamel following a relatively long exposure to acidified and thickened peroxide gels, held against

HYDRODYNAMIC THEORY: Odontoblastic processes are drawn into the dentinal tubules as a result of negative osmotic pressure caused by very thick, acidic



teeth in mouth trays or strips. Because bleaching works slowly, prolonged contact times with the concentrated gels result in a negative osmotic gradient. This inside-out osmotic pressure then draws the pulpal odontoblastic processes into the dentinal tubules, entrapping and pinching them as shown in the figure on the right. Ultimately, this culminates in transient dentinal pain.

Furthermore, even though professional chairside whitening treatments take considerably less time, and may be slightly less viscous, than OTC preparations, the majority of patients still experience tooth sensitivity. This is because other modes of enamel dehydration come into play during the typical in-office procedure. One such etiology comes from the “bleaching light” that is frequently used by dentists. These lamps cause heating of the tooth, thereby drying out the enamel. As before, when the enamel dries, the pulpal fluid and odontoblastic processes are drawn into the dentinal tubules resulting in a transient sensitivity reaction.

An additional consequence of bleaching lamp dehydration is that enamel becomes chalky and opaque looking. The “frosted” white dull enamel temporarily masks subsurface stains, as well as the yellow dentin lurking just beneath. Thus, there is likely little doubt that patients are generally very happy with tooth color immediately after such treatment, regardless of pain. However this sense of satisfaction is short lived, as both dentist and patient are sometimes greatly disappointed when the enamel rehydrates and becomes translucent again, in as little as 2 to 7 days (7,8,9).

Unfortunately, even the elimination of the bleaching lamp does not solve the problem of in-office whitening dehydration and sensitivity. That is because that the procedure still takes an hour or more to complete and a lot of simply keeping the mouth open for a long period of time, with the teeth isolated (via cheek retractors and rubber dam), can cause high levels of tooth dehydration on its own. Therefore, regardless of mode of bleaching therapy, the outcomes are consistent: transient tooth pain, no stain removal and rapidly fleeting results.

Therefore, in order to provide a better understanding of how Power Swabs FACT Technology™ is such a large paradigm-shift away from current technologies, the next pages explain the pros and cons of using peroxides, carbomer thickeners and acids to create bleaching gels.

Why Peroxides Aren't The Answer

Carbamide Peroxide and Hydrogen Peroxide are the two most commonly used tooth bleaching agents used in today's professional and consumer products. Although the very notion of “teeth whitening” conjures the impression of teeth becoming cleaner, nothing could be farther from the truth. Peroxide is not a “detergent agent.” It is, in fact, a “bleaching agent,” and as such, has no ability to effectively clean anything. Bleaching agents are indeed useful in many segments of daily life, and can be the ultimate way to make items as white as they possibly can be, but only if they used in a supporting role for other cleaning agents. For example, in laundry care, bleach is optionally added to the clothes washer when cleaning white fabrics. However, unlike tooth bleaching procedures, the primary whitening action comes from the use of stain pre-treaters and laundry detergent. Adding bleach alone to the washing machine would simply never be considered. Bleach alone would work very slowly and would likely destroy the fabric. The same principals can be applied in oral care, but these have largely been ignored to date.

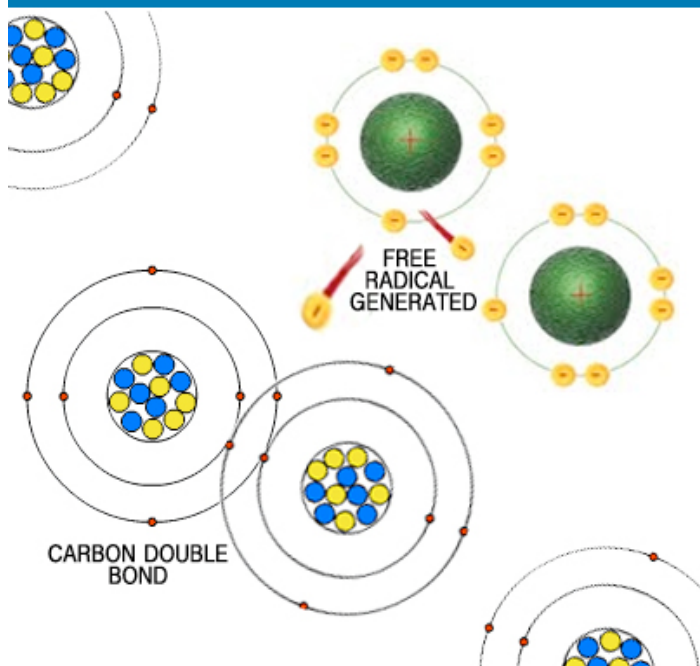
Chemically, bleaching agents work by breaking down into active “free radicals” that lightening the color of organic, double bonded stain molecules (12). Bleach has no effect on other kinds of stains. However to the extent that most stains are organic and double-bonded, stains can disappear to the eye when treated with bleach for a period of time. However its is key to note that although stains treated with bleaching agents may not visible, they actually still remain in place, and over time, re-appear as they re-acquire their original bond structure and coloring.

Therefore tooth-whitening products that primarily rely on bleaching agents for efficacy can only

achieve a temporary “clearing” of stain molecules. This effect gives dentists and consumers the illusion of whiter teeth, but it is still just an “illusion.” The illusion of whiteness can be acceptable in fabric care or carpet care, because bleaching is only the final step after thorough cleaning. By using a pre-treater and detergent to remove most stains, the ultimate “rebound effect” of bleach will be minimized. However, in the case of teeth bleaching, none of the imbedded stains have been pre-removed at all. The stains become clear and then rebound occurs and the enamel becomes re-colored. This, of course, is not what consumers expect.

What’s more, the mechanism of action of bleaching agents is very slow, sometimes requiring weeks, or months, to fully complete. While long treatment times are inconvenient for professionals and consumers, it is a helpful attribute for manufacturers, because this slow action aids the process of enamel dehydration and the “acid etching effect,” which all combine to yield temporarily white teeth.

BLEACHING FREE RADICALS WHITEN BY BREAKING
CARBON::CARBON DOUBLE BONDS AS SHOWN BELOW.
MOLECULES SLOWLY LIGHTEN FROM COLORED TO CLEAR



In summary, bleaches do have the ability to lighten the color of some organic stain molecules, but their over use, has several undesirable consequences: 1) bleaches do not clean teeth; 2) the sole dependency on bleach as a primary whitening agent yields only an illusion of tooth whiteness through temporary rearrangements of bond structures and because of its slow action that lets other molecular forces (such as dehydration and etching) become dominant; and 3) bleaches are caustic in nature and cause irritation and pain when applied to any human tissue.

Why Thick Is Not Good

Thickening agents used in most oral care products are related to a class of chemicals known as “carbomers” (i.e., based on double-bonded carbons). Used in tooth bleaching formulations, these thickeners help adhere peroxide onto teeth for some amount of time so that the molecular stain-lightening activity of the bleach can occur. But, the composition of these thickeners prevents them from addressing the tough stains deeply embedded in the tooth enamel. The tooth enamel is not a singular coating on the teeth, but rather it is composed of numerous rod-like structures with minute gaps between them as shown in the figure to the right. The most stubborn stains inhabit those gaps. Simply put, the thickeners create bleaching agents that are just too viscous to enter the gaps between the rods. No bleaching agent can attack the worst stains in the teeth if the carrier agent cannot penetrate.

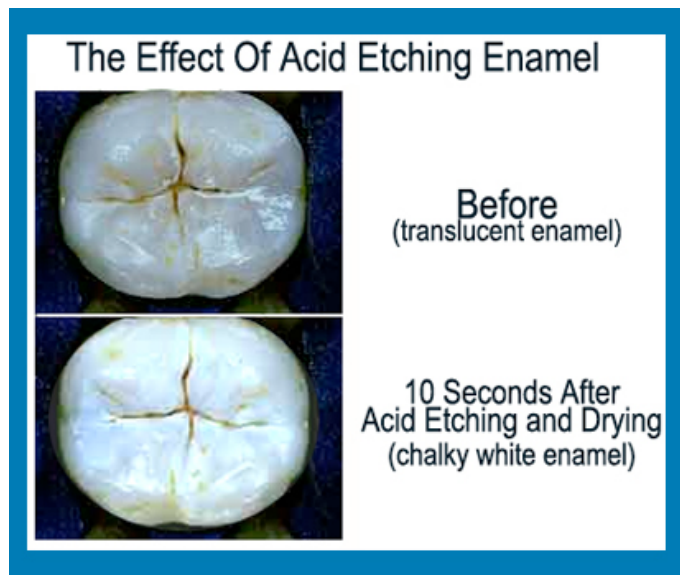
Furthermore, carbomer-based thickening agents are really large polymers of acrylic acid (13), and thereby contain many millions of carbon double bonds. Unfortunately this means that carbomers likely serve to only further limit modern bleaching gel activity because their ubiquitous carbon double bonds would scavenge and inactivate the vast majority of the active free radicals liberated from bleaching agents. Hence the nature of the molecular bond structure of carbomer thickeners largely negates whitening activity, even regardless of the high viscosity and poor penetration ability that they ultimately yield.

Lastly, thickeners in bleaching agents create an osmotic gradient that draws water out of the teeth. As a result, the enamel dries out and changes from a clear translucent structure, to one that is opaque and chalky white. The temporary good news is that the opaqueness of dried-out tooth enamel prevents underlying stains and yellow dentin from being seen. In fact, it is this chalky white appearance that most dentists and patients mistake for “true” tooth bleaching. However, desiccation is not really a good thing in the long run. For one thing, it is the likely the main cause of tooth sensitivity as described above, by causing the entrapment of odontoblastic processes into the dentinal tubules. It is also very temporary, so that one to two weeks after bleaching treatment has finished, the tooth re-hydrates and the white tooth color disappears as the enamel becomes translucent again.

Acids Makes Matters Even Worse

Acids have simple chemical purposes in most current tooth bleaching formulations: to stabilize the peroxide, to increase-shelf life and to prevent the bleaching products from foaming out. A secondary, but unintended effect is that they also cause mild acid etching and decalcification of the enamel surface. Much like desiccation, this causes the enamel to change from a clear translucent structure, to one that is opaque and chalky white. The temporary good news again is that the opaqueness of acid-etched tooth enamel prevents underlying stains and yellow dentin from being seen.

But, acids have several detrimental effects that outweigh this one benefit. To begin, acids burn, adding greater discomfort to treatments that already cause pain via peroxide. Further, the acid etching of teeth over time is detrimental to tooth structure and only results in a temporary whitened appearance. Once teeth have re-calcified some time after bleaching treatment, the enamel again becomes translucent, and the white color that was initially achieved through acid etching, largely diminishes. The figure below shows the “temporary” whitening effect associated with acid etching. Bear in mind that the tooth will return to normal in 2-7 days.



Hence, the bottom line is that most oral care treatments available over the counter or through dental professionals are slow, painful, transitory, often harmful to the teeth and do not actually meet the consumer’s desire for clean white teeth in the long term. Dental professionals certainly do not wish to cause their patients pain for little benefit. Thankfully, a new approach will now become available in the form of Power Swabs FACT Technology™ as developed by the Power Swabs Corporation and described below.

Power Swabs FACT Technology™

The Power Swabs Corporation has created a significant new innovation to be used in many kinds of dental and oral care products named Power Swabs FACT Technology™. At its core, this new “aqueous” technology has been developed around the concept known as the “Law of Mass Action Cleaning” that heretofore has not yet been applied in dentistry or oral care, and serves as the basis for many of its United States and Foreign patent applications. Although The Power Swabs Corporation envisions this technology to be novel and certainly very useful in the realm of the oral cavity, in fact the Laws of Mass Action Cleaning have been proven to be a successful method for

formulation of many other product segments including almost all commercially available surface and fabric cleaners.

The oral health care products now being developed and manufactured by The Power Swabs Corporation use this technology to deeply clean teeth, by addressing stains at the molecular level in a similar way that laundry detergents or carpet cleaners work. One possible reason why this well-known cleaning principal has not been used in oral care products to date may be because the chemical ingredients generally used in these class of cleaners have not been safe for use in the mouth. However The Power Swabs Corporation scientists have addressed this problem by creating a true stain cleanser that uses all ingredients that the United States of America Food and Drug Administration (FDA) lists as being generally regarded as safe (GRAS) for the food and cosmetics industries. In fact, as currently applied, the ingredients now being used by The Power Swabs Corporation to implement this new cleaning strategy are derived from naturally-occurring foodstuffs and elements naturally safe to ingest in reasonably small quantities.

Hence The Power Swabs Corporation has developed the first orally acceptable “tooth detergent agent” that can be used in many oral care whitening and cleaning products in place of, or along side “tooth bleaching agents.” These tooth detergent agents have the unique ability to actually remove both surface stains and the heretofore unreachable subsurface stains between the enamel rods – thoroughly, deeply and rapidly, without many of the negative attributes of bleaching agents. To understand how tooth detergent agents work to remove stains from teeth, it is incumbent to thorough comprehend the Law of Mass Action Cleaning. This equilibrium reaction incorporates eight elements: Temperature, Time, Action, Solvents, Detergents, and Surfactants, Chelators and Saponifiers. The first three items are straightforward and are apply to some degree in current oral care products. Higher temperatures and greater exposure times create more cleaning effect. The intensity of the action applied – whether through effervescence or physical scrubbing – raises the cleaning effect.



But, the final five elements in this cleansing formulation have been missing from oral care products because of their chemical nature. Solvents are high penetration, low viscosity chemicals that break the molecular bonds within a stain. They also help to break the molecular bond between the positively charged colored stain molecules and the negatively charged surfaces that they are physically bound to. Surfactants are also known as “wetting agents” and are high-penetration, neutrally-charged, foaming ingredients that attempt to lift the stains from the surfaces with buoyant bubbles. Anionic Detergents are critically needed negatively-charged ingredients that bind to the positively charged, partially dissolved and buoyant stain particles, prevent them from resettling onto charged surfaces, and then lift them permanently away. Chelators work as water softeners, binding excess calcium and other minerals that would otherwise bind to, and interfere with anionic detergent activity. Saponifiers work to unclog and free the tiny spaces between enamel rods from grease plugs that build up over time. They combine with fatty or greasy elements to form a kind of soapy compound that can easily be foamed and washed away by the aqueous carrier of the newly devised tooth cleansing agent.

By using unique chemistry derived from foodstuffs, The Power Swabs Corporation brings the Laws of



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an explanation of exactly how this new technology works to enhance smile aesthetics and to promote oral health

of Mass Action Cleaning to realm of oral care products for the first time in history. To appreciate the paradigm shift that will take place, imagine a time, not too long ago, where “fabric care” was limited to only water, soap, acid, physical scrubbing and bleach. Then imagine how the world was affected when modern laundry detergents and pre-treaters were introduced! To be sure, the old technologies of only using water, soap, acid, scrubbing and bleach satisfied the world’s needs for fabric cleaning in some way, but these technologies did not clean very efficiently, easily or safely. But in the present world of fabric care, the Laws of Mass Action Cleaning have been fully implemented and has given rise to laundry detergents and pre-treaters that give consumers the ability to clean clothes with a of minimum effort, in a short period of time, with a high degree of safety and the highest possible efficacy.

That is not to say however that water, surfactant, acid, scrubbing and bleach will be become obsolete or eliminated. They will not. For example, in fabric care, Tide™ and Shout™ coexist in the world with Clorox™. Expect the same to be true in oral care. The Power Swabs Corporation technologies will rule the day, but will likely coexist and be synergistic with current market leading bleaching products.

Dentist and Consumer Benefits

Consumers and Professionals will both benefit in many ways from the implementation of Power Swabs FACT Technology™ into oral health care products. Supplied in a collapsible swab for use by dental professionals, this technology can be used as a pre-treater stain remover to be used in conjunction with professional cleaning (dental prophylaxis) appointments. An important benefit when The Power Swabs Corporation Professional Stain Remover Swabs are used during professional cleaning appointments is that tooth stains can be removed faster, gentler and with less hand fatigue suffered by the hygienist or dentist. Faster means that both patient and professional will benefit by increasing the time available for other pursuits and by affecting cost and profit margins. Gentler stain removal means less tooth structure will be lost through abrasive cleaning. Less hand fatigue means a healthier dental professional over the course of their career. Deeper,

more thorough stain removal means whiter looking teeth and an overall happier, more satisfied patient.

As Used in New Power Swabs™

Also supplied in a higher strength formulation, the Power Swabs FACT Technology™ can also be used as a pre-procedural cleaner before in-office and tray whitening therapies. This product, known as Power Swabs (the product you are likely now evaluating) has the unique ability to pre-procedurally eliminate most surface and subsurface stains, between enamel rods and interdental surfaces. Because use of the technology in this way allows most of the enamel stains to be pre-removed, and because the

Power Swabs FACT Technology as used in conjunction with professional power bleaching. The result is an 11-shade improvement with zero sensitivity.

Before



After





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technology also helps the bleaching gels to penetrate better into the teeth, all whitening treatments can proceed to successful conclusion at a much more rapid pace. Less time means higher profits for the dental practice and less inconvenience for the dental patient. Furthermore, this use of Power Swabs FACT Technology™ works to eliminate the dehydration, irritation and etching caused by the acid-thickened carbomers found in today's tooth whitening preparations, thus eliminating the pain-inducing elements often associated with other present day whitening treatments. Less transient tooth pain greatly benefits the consumer and eliminates a large barrier that prevents many patients from seeking treatment. With this barrier removed, it can be presumed that more people will seek these therapies resulting in greater dental practice profits. Furthermore, because teeth are actually cleaned with the Power Swabs Corporation products, stains are actually removed and not merely lightened. The net affect of true cleaning is overall healthier teeth and longer-lived whitening effects. Lastly, in consideration of all the above, a further benefit is that consumers will likely not experience the "buyer's remorse" of paying for peroxide-based whitening treatments which are expensive, painful and short-lived.

Pearl White™ Daily Cleaning Dental Swabs

Finally, Power Swabs FACT Technology™ can be used as a stand-alone, convenient, non-abrasive daily dental cleaner when supplied in a foam-tipped, collapsible swab. These consumer products will be known as Pearl White™ Daily Cleaning Dental Swabs and they can deliver significant consumer benefits.

Because Pearl White™ Cleaning Swabs ingredients will be made of healthful ingredients and foodstuffs, the cleaning solution may be safely consumed, eliminating the need to be near a sink for the purpose of expectoration. People are unlikely to expectorate in public washrooms because of embarrassment

and therefore they rarely clean their teeth during work hours or after consuming meals in restaurants. By breaking down this barrier, consumers benefit greatly because they can comfortably and conveniently clean their teeth whenever and wherever necessary, resulting in a healthier smile. Because they are extremely portable and convenient to apply, Pearl White™ Daily Cleaning Dental Swabs may also be sold into hospitals for convenient bedside tooth cleaning, supplied in airplanes for in-seat tooth cleaning, sold to restaurants as a sort of advanced "liquid toothpick" and sold to alcohol and coffee bars with the benefits of immediate stain removal after drinking highly staining coffee, tea or red wine.

Furthermore, the Power Swabs FACT Technology incorporated into each Liquid Toothbrush is non-abrasive and this will cause less tooth and gum abrasion and healthier tissues than traditional abrasive toothbrushing. One other optional benefit that may ultimately derived by using Pearl White™ Daily Cleaning Dental Swabs comes from the added benefits can be included only because expectoration is not needed. These additional benefits may include addition of a stimulant or daily vitamins for a "morning version" of the product, or a sleep inducing agent included in an "evening version," or even systemic fluoride for children, instead of present-day fluoride tablets or drops.





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Conclusions

With its recent release of new professional Power Swabs™, the Power Swabs Corporation begins its mission of delivering a new method of oral care that brings true anionic detergent action to the realm of oral cleaning and whitening. It achieves this goal without the use of acids, carbomer thickeners, peroxides and abrasives, and Power Swabs ushers in a new era of convenience, safety and efficacy to cosmetic dentistry.

In designing and developing new Power Swabs FACT Technology™, our corporation has considered the needs of both consumers and dental professionals, and has demonstrated that the new technology is flexible and can be configured as appropriate for various customer segments.

Dental professionals will benefit from reduced time costs associated with cleaning and whitening procedures, increased profits and less worries about patient discomfort.

Consumers can enjoy the benefits of the new technology knowing that Pearl White Dental Cleaning Swabs has the potential increase their overall oral health and cosmetic appearance through true, rapid and thorough stain removal.

Although there is no "silver bullet" that can achieve a permanent state of extreme whiteness in teeth, the advancements in oral care technology caused by Power Swabs FACT Technology™ underscore the Power Swabs Corporation's long-term commitment to changing the future of oral care that helps people and dental professionals throughout the world to realize their full potential in oral health and smile aesthetics.



Image of New Power Swabs™. Each kit contains 14 liquid-filled collapsible swabs. The cost to manufacture this product is approximately \$6.00



APPLICATION TECHNIQUE

Apply onto teeth in a swirling, scrubbing motion

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