

The International Market For Brand Protection Solutions - Automotive and Aeronautical Parts

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Abstracts

Vandagraf International has been researching and publishing a series of reports on 'Brand Protection Solutions'. Each report focuses on specific vertical markets.

The market for Automotive and Aeronautical parts includes replacement parts for Cars, Vans, Trucks, Tractors, Agricultural Machinery, Earth Movers/Heavy Construction Plant, Tyres, Aircraft, civil (private and commercial) and also military aerospace and defense equipment and replacement parts, including missiles and space vehicles.

The Automotive and Aeronautical parts sectors comprise a broad range of product categories, ranging from mechanical parts, sub-assemblies, assemblies, through to complete jet engines and other major items and also from bodywork panels / bumpers / fenders and structural parts through to electronic components and tyres.

Counterfeiting is widespread in the Automotive Parts & Components Aftermarket sector (including Tyres) and has become a major problem for the industry.

Best estimates put the value of global financial losses due to counterfeiting and other product related crimes relating to the Automotive Parts & Components Aftermarket at around \$15.5 billion in 2008. This is equivalent to just over 3.0 % of the total aftermarket for Automotive Parts and Components, (including Tyres) which ran at \$506.0 billion in 2008.

In the Aeronautical and Defense sectors best estimates put the cost of global financial losses due to counterfeiting and other product related crimes relating to counterfeiting of replacement and re-conditioned parts at around \$2.5 billion. This is equivalent to 2.5% of the total Aftermarket for Aerospace & Defense parts, which ran at estimated \$101.2

billion in 2008.

This report identifies vulnerable products categories and identifies niche opportunities for brand protection solutions. The report also describes the different approaches to brand protection that are available to companies and organisations operating in these sectors.

An overview of problems and key drivers, together with descriptions of appropriate solutions, including actual case studies are included. The case for 1st, 2nd and / or 3rd level brand protection technologies is examined.

Automotive Aftermarket – Replacement Parts - The biggest problem is with 'generic' components that are most frequently replaced, which includes routine service type parts, such as air filters and oil filters, brake pads, spark plugs, clutch linings, belts, radiators, hoses, windscreen wiper blades.

Counterfeiting periodically also extends to Automotive Accessories, such as alloy wheels, tow bars, luggage racks, child seats and the like and also Crash damage replacement parts.

The Automotive replacement parts market is complex and is characterized by several routes to market: Official agents and dealers, Exhaust system / brake / tire replacement specialists, Automotive retail stores, A widespread network of unofficial mechanical and bodywork repair shops. So brand protection solutions usually need to be effective across more than one route to market.

In addition to counterfeiting, another big problem in the Automotive sector is vehicle theft. Today Vehicle Identification Number (VIN) labels / plates have been widely adopted in the Automotive sector, which can greatly facilitate detection and identification of stolen and / or illegally reconstructed crashed automobiles.

In the face of growing concern about counterfeit Automotive parts, manufacturers have increasingly been specifying additional security and brand protection features, including holograms, tamper evident void devices, forensic markings, unique inks and other sorts of devices that can be integrated in labels. Alternative means to security labels include laser etching.

Various types of labels, including durable labels are used for numerous types of application in cars and other types of vehicle, including under the hood / bonnet labels,

component labels, airbag warning labels, bar code consecutively numbers ID and traceability labels, name plates and rating plates, serial plates, warranty labels, care / use instruction labels, quality inspection labels and more.

Aeronautical and Defense Aftermarket – Replacement and Reconditioned Parts –

The consequences of counterfeiting in this sector tend to be catastrophic and so the identification / authentication of potentially counterfeit replacement parts and accessories for aircraft and the like is of critical importance.

In the Aerospace sector, there have been some high profile cases of counterfeiting and fraudulent documentation for reconditioned parts and / or crash damaged parts, which have even subsequently led to air crashes and loss of life.

The Aeronautical sector can be highly attractive to counterfeiters for a combination of reasons: High unit values of items, Huge mark-ups can be achieved, Vast number of different parts that comprise an aircraft, The usually urgent need to replace parts often on aircraft situated in remote corners of the globe.

'Unapproved parts' is the US based FAA's (Federation Aviation Administration's) term for components not certified as airworthy – This covers everything from fraudulently produced knockoffs made with inadequate alloys to recycled pieces misrepresented to hide defects, age or crash damage.

There are established recording procedures to track and trace parts. These procedures involve the so-called 'Yellow Card' in the US. It is widely considered that the present system does not provide an effective solution to the problem.

The problem extends well beyond commercial replacement parts deep into the realm of Defense. It has become increasingly common for government defense authorities to unwittingly acquire mis-represented / mis-labelled commercially rated components for defense applications which generally require higher spec. parts for more demanding applications. In a worst case scenario, unauthorised electronic parts used for a defense application could contain malicious software that would malfunction and possibly even contaminate other on-board electronics systems.

The aircraft replacement parts sector consists of four major types of operators: Manufacturers that make the parts, repair stations that maintain and repair aircraft in the field, aircraft operators / airlines, brokers (several thousand brokers located all around the World). The Airlines depend on an unregulated network of dealers keep spares in

stock which are then sold to repair stations or the Airlines directly.

The Aerospace and Defense parts sector is in need of an (industry-wide standardised) track and trace system to validate parts. – Some kind of ‘pedigree’ system is desirable (this could be paper based or electronic, involving RFID).

Tyres and other types of components made of rubber , including belts, hoses, mountings, washers and the like are used widely across the whole Automotive & Aeronautical industry - A high degree of intellectual property (IP) is involved in the tyre business, including large numbers of patents, trademarks and copyrights - Tyres are significantly affected by counterfeiting and other types of product related crime.

The replacement market for tyres is less concentrated than the OEM market with a greater number of customers. Leading tyre companies tend to be active in both OEM and replacement markets. The OEM tyres supply chain is well controlled, but the replacement tyre supply chain is based on a number of routes to market and is not secure.

Leading manufacturers have been able to establish strong brand reputations for quality and safety, which has enabled these companies to implement price increases over the last several years. Pirated reproduction tyres or other rubber products are very often constructed from inferior materials or manufacturing process quality as genuine products and can often represent a significant safety risk.

Leading tyre manufacturers have made significant efforts over time to differentiate their products:

High-margin, high spec. strongly branded tyres

Low-margin, lower spec, commodity budget tyres.

Typically high and low margin tyres are branded separately. This provides the manufacturer with more flexibility to increase prices on the leading brand names. Such price / margin increases are attractive to potential counterfeiters and tyres have increasingly been subject to attack by counterfeiters and also IP rights infringements and other types of product related crime.

Budget tyres are typically manufactured in Asia, while premium tyres are produced primarily in Europe and North America.

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