

# Smart Textiles

## RFID Chips

BUF 4500: Contemporary Topics in the Fashion Industry

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# Brief History

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- ❑ Patented in 1983, by British inventor Charles Walton, RFID chips made it possible to store information electromagnetically.
- ❑ In recent years, RFID has expanded to encompass the seemingly unexpected market of fashion.

# Retailers Use RFID Chips to:

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- ✧ Track clothing.
- ✧ Prevent theft.
- ✧ Ensure quality and authenticity.
- ✧ Prevent counterfeit goods from flooding the luxury goods market.

# Industries That Use RFID Technology

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- ∞ Cryptocurrency (i.e. Bitcoin)
- ∞ Diamond Industry (i.e. Da Beers)

# Counterfeit Goods

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- ✧ They account for roughly 2.5% of global imports
- ✧ In 2013, the “value of imported fake goods at \$461 billion (Business of Fashion, 2018)”

# Brand Loyalty

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- ☞ Ensures that products are authentic.
- ☞ Maps out the product lifecycle, working conditions of the factory, how the item was made & etc.
- ☞ Display how the fabric was grown and what chemicals were used in the production of the garment

# Designers using RFID

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- ❑ Moncler, Zara, Rebecca Minkoff, and Gerry Weber are known brands that have integrated RFID into their collections.
- ❑ Gerry Weber, a German brand, has decided to attach RFID into the 30 million garments produced every year which costs only 9 cents to tag per garment
- ❑ Using RFIDs are small preventative steps that can save fashion houses several thousands per year

# We're already using it

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- ☞ RFID chips employs the same technology that an Apple Pay user uses to make purchases
- ☞ Rebecca Minkoff uses RFID technology in their stores for improved shopping experience and simplified checkout

# Rebecca Minkoff



# Cost Efficient

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- ❧ According to an article written by LaunchMetrics.com, due to counterfeit products, approximately €26.3 billion is lost annually and jeopardizes 363,000 jobs in the fashion industry.
- ❧ Fashionista.com states, “It costs Gerry Weber, for example 9 cents to tag each of the approximately 30 million garments it produces a year.”
- ❧ Less time is used when checking inventory levels at retail stores. Thus, saving the company from paying thousands more some something that can be completed faster with RFID technology.

# Citation

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Alvarez, E. (2017, August 22). How RFID tags became trendy. Retrieved from <https://www.engadget.com/2017/08/22/rfid-tags-in-fashion/>

RFID Technology: 5 Ways Fashion Brands Are Using It. (n.d.). Retrieved from <https://www.launchmetrics.com/resources/blog/rfid-technology-5-ways-fashion-brands-are-using-it>

Indvik, L. (2016, April 14). Why Luxury Brands Are Putting Microchips in Your Clothes and Accessories. Retrieved from <https://fashionista.com/2016/04/moncler-ferragamo-rfid-counterfeiting>

Swedburg, C. (n.d.). Rebecca Minkoff STORE Uses RFID to Provide an Immersive Experience. Retrieved from <https://www.rfidjournal.com/articles/view?12445>