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Privacy for RFID and the Evolving Use of RFID

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#### IEM

### **Physical Means for Privacy Protection for Retail Item Tagging**

- **Kill Command:** Included in the EPCglobal protocol. Makes tags unreadable after after point-of-sale This rules out use for returns, recalls, authentication, or recycling.
- **Blocker Tags**: "Spam" for RFID. Interferes with the reading of tags within the same reader zone as the blocker tag.
- Clipped Tags: Consumers tear away part of the tag after sale.
  Reduces read range from 10 meters to a few cm.
- Metal Lined shopping bags, purses, wallets: Approach used for new US passports.
- **Mechanical Destruction:** Bring your own hammer, zapper, etc.
- **Encryption**: May be used to increase both security and privacy.

## **Clipped Tag for RFID Consumer Privacy**

- **RFID tag structure** that permits a consumer to partially disable a tag to transform a long read-range (10 meter) tag into a proximity tag (few cm)
  - Adds the option of <u>consumer choice</u>
  - Provides visual confirmation that tag has been disabled
  - <u>May be read later</u> if desired by close proximity, e.g. for returned items, authentication, and recycling

#### Example: Tear-off for partial antenna removal (like opening a ketchup packet)







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#### RFID for the supply chain (EPCglobal) is climbing the adoption curve





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# Thank You !

Questions ?

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