

REFLECTIONS



ON THE NEW REVERSE ENGINEERING LAW

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DISCLAIMER

NOT A LEGAL CONSULTATION

OUR MOTIVATION

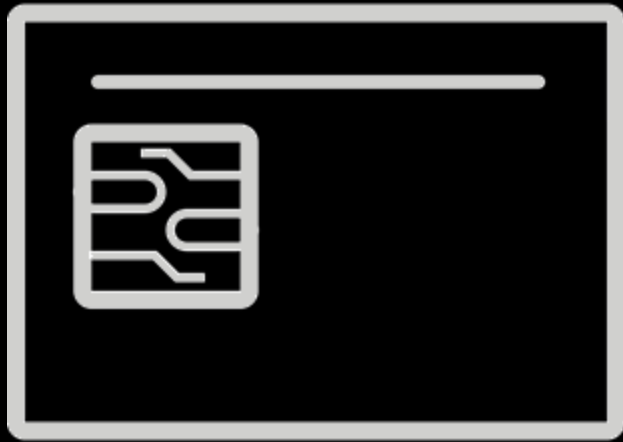


- Talk at 35C3:
„Mehr schlecht als Recht – Grauzone Sicherheitsforschung“
- **University researchers reverse engineered software** which claimed to provide “absolute security” ...
- ... leading to more than one year of (personal) **legal trouble**
- ... resulting in a settlement
- Our question: What is the **legal situation of researchers** utilizing reverse engineering?

SELECTED RESEARCH AT



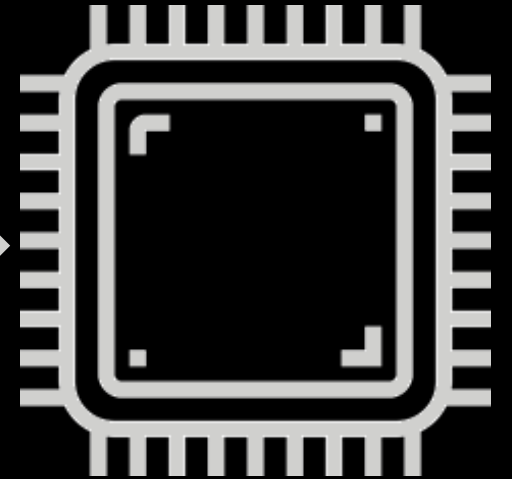
EMSEC



SMART CARDS

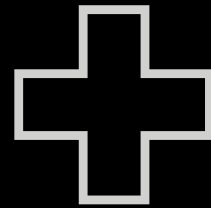
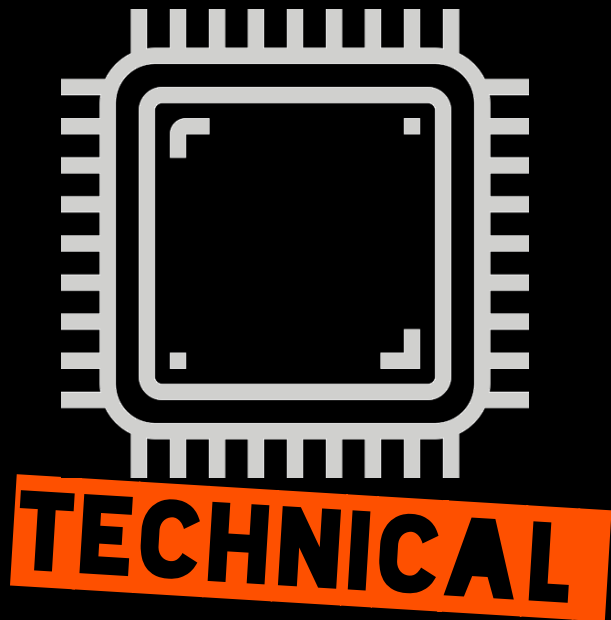


CAR KEYS



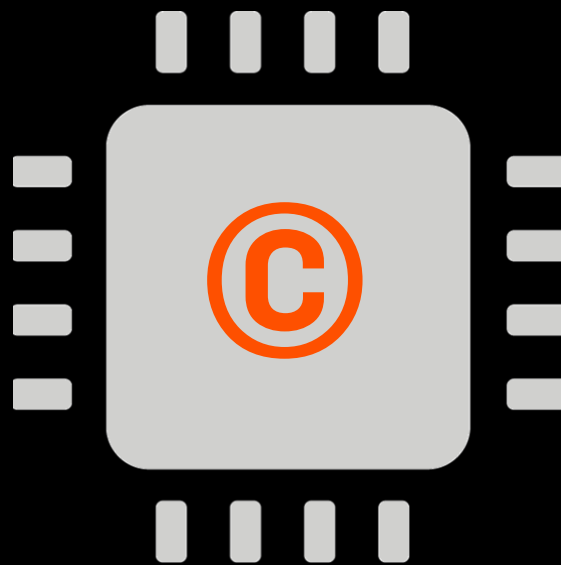
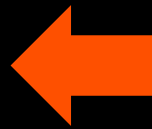
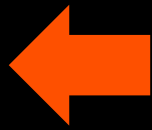
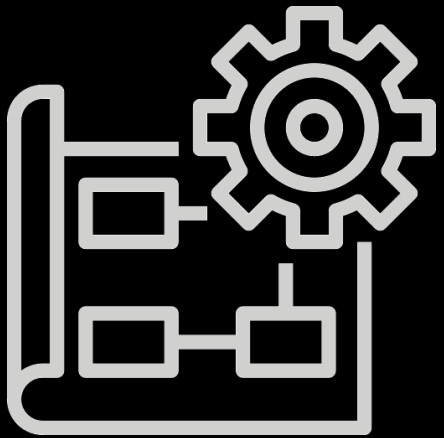
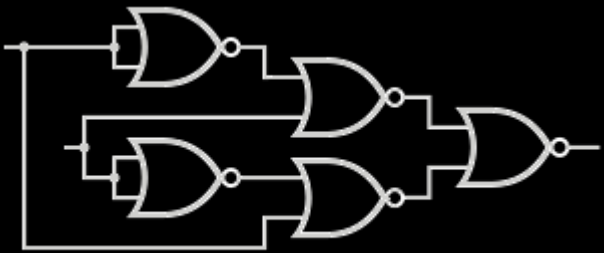
**HARDWARE
TROJANS**

OUR PERSPECTIVE



SETTING

HARDWARE REVERSE ENGINEERING



RELEVANT AREAS OF LAW

INTELLECTUAL PROPERTY LAW



COMPETITION &

TRADE SECRET LAW

INTELLECTUAL PROPERTY LAW

SEMICONDUCTOR PROTECTION ACT

Idea: Protection of three-dimensional structures of micro-electronic semi-conductor products (topography), if they possess individuality (Sec. 1).

Only the **topography** as such **is protected**, not potentially stored information (Sec. 1 § 4).

Basic Rule: **Prohibition of reproduction** of the topography (Sec. 6 § 1).

INTELLECTUAL PROPERTY LAW

SEMICONDUCTOR PROTECTION ACT

Exception (Sec 6 § 2 No. 2): The topography is **not protected against**

→ Reproductions of the topography for the **purposes of analysis, [...], or education.**

INTELLECTUAL PROPERTY LAW

PATENT ACT

Idea: Protection of a technical innovative invention.

Basic Rule: Prohibition of unauthorized use of the product protected by the patent (cf. Sec. 9).

INTELLECTUAL PROPERTY LAW

PATENT ACT

Exception (Sec. 11 No. 2):

The patent **is not protected against actions for experimental purposes**

- wide interpretation
- for gaining new knowledge on a technical uncertainty

COMPETITION & TRADE SECRET LAW

TRADE SECRET ACT AND UNFAIR COMPETITION ACT

Idea: Establish upright and fair competition and **avoid any accretion of secret know-how** in order **to use it against a competitor.**

Trade secret:

- **not generally known** among or readily accessible to persons within the circles that normally deal with the kind of information in question;
- **commercial value** because it is secret;
- **subject to reasonable steps** under the circumstances, by the person lawfully in control of the information, **to keep it secret.**

COMPETITION LAW

UNFAIR COMPETITION ACT

Former Sec. 17 § 2 established a **general prohibition of acquisition and use of a trade secret** in an unfair way.

For reverse engineers: Trade secret dependent on simplicity and easiness of the reversing act.

NEW TRADE SECRET LAW

TRADE SECRET ACT

- **Basis:** EU Regulation 2016/943
- Time limit for adapting national law accordingly: June 2018
- Entering into force: April 2019

- **Aim:** Harmonizing the rules on trade secrets throughout the EU

NEW TRADE SECRET LAW

TRADE SECRET ACT

Sec. 3 § 1 No. 2: Acquisition of trade secret lawful

1. by the means of observation, study, disassembly or testing of a product
2. that has been made available to the public or that is lawfully in the possession of the acquirer of the information who is free from any legally valid duty to limit the acquisition of the trade secret

RELEVANT AREAS OF LAW

INTELLECTUAL PROPERTY LAW



COMPETITION &

TRADE SECRET LAW

GUIDELINES FOR RESEARCHERS

KEEP CALM AND DO YOUR RESEARCH

FOLLOW RESPONSIBLE DISCLOSURE PROCESS

IN CASE OF EMERGENCY: ASK A LAWYER 😊

SUMMARY

Security **research is taken into consideration** by lawmakers

However, there is **no guarantee** you will not get sued

BUT: if you **follow the guidelines**, chance is low!

SOURCES

Icons made by

- Darius Dan
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THANK YOU!

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