

ML² - Deliverable 12.2

Mid-time report on filling intellectual property rights for ML²

Status Quo

- patent map: root work regarding possible influencing IPR has been examined and is further performed
- database with respective data is instantly being extended/updated
- 4 fields of research were identified by the consortium
- key word based research has been examined
- identification of key patents and discussion of possible impact on ML²
- identification of possible filing of own patents

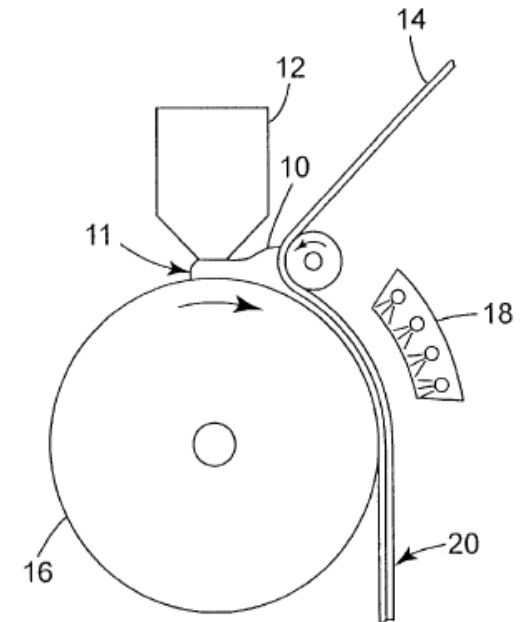
Fields of research

■ diagnostic devices produced by laminated films

- Methods of manufacturing microfluidic articles (US 6,375,871 B1), 2002

■ for certain structure types restrictions need to be obeyed

■ task: consideration, but not critical, freedom to operate is ensured (further respective patents expired)



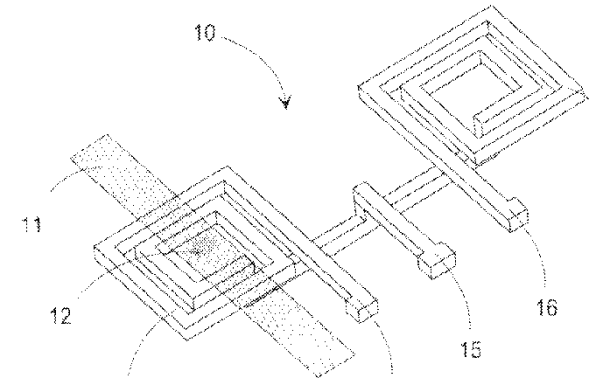
Fields of research

- lateral flow device using magnetic nano particles

- Device for measuring magnetic particles and corresponding method (US 8,026,716 B2), 2011

- critical with direct impact on demo 3

- task: approaches for bypassing are in progress, discussion with patent holder has started to found cooperation



Fields of research

- light guide plates / light guide films using a reflective backplate with localised adhesive bonding
 - no critical patents discovered yet
- sufficient degree of novelty->potential filing of new patent confirmed
- task: economical assessment->patent application

Fields of research

■ immunoassay with optical detection system

- metal sol particle immunoassay (US 4313734), 1982
- digital processing unit with a time trigger (US 8,606,528 B2)
- electronic readout by measurement of the electrical resistance (EP2382458 A2)

■ Freedom to operate due to expired basic patent basically given

■ task: detailed research and evaluation on digital readout system to assure the *freedom to operate* and assess opportunities to file further patents

- sensor principle
- processing principle
- overall system structure