



FIST SA

Technology Transfer & patent mapping

A strategic partnership



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eTISC WIPO
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FIST SA



Subsidiary of  and of 

Established in 1992
Team: 47 employees



Key figures



Near **6 000** alive patent families

Management of approximately **1 400** patent families



Negotiation of **70 to 100** exploitation contracts per year

2 700 alive contracts

Management of **1,490** exploitation contracts

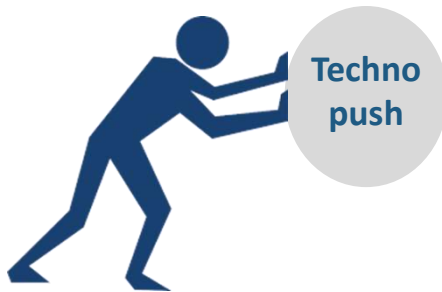
Valorization process

Licensing out

Different approaches



Carrot licensing



Stick licensing

- Emerging technologies
- Partner search
- Identification and quantification of potential markets

- Identified purpose
- Search technology

Carrot licensing

Techno push



Understand technology

- Maturity, development
- Patent clusters
- Relevance of protection



Carrot licensing

Techno push



Anodes of li-ion batteries

Date: 2011

Numéro Brevet: WO2012160315 A1 FR2975833 B1 US2014079997 A1 KR20140039204 A EP2715839 A1 JP2014519159 A

Overview based Anodes 2015 (VOI11UKE): voir documents

Rechargeable metal or metal-ion cell

Date: 2010

Numéro Brevet: WO2012066048 A1 TW201236239 A SG190252 A1 US2013230771 A1 FP2641288 A1 JP2013544422 A

Overview based Anodes 2015 (VOI10RE): voir documents

Fluorinated binder for positive electrodes for lithium batteries

Date: 2009

Numéro Brevet: WO2010050613

Citations: CN102356490 A

Numéro de priorité: FR20100050613

Brevet représentatif: FR2955709 B1 (Calculé)

Citations: EP1926163, US2005214644, US2007128516, US2008206651

Auteurs: Jordy Christian, Caillon Georges, Roumegas Nadege, Touahir Larbi, Kocan Anna, Gacon Thierry, Ozanam François

Affiliations: CNRS CENTRE NATIONAL RECHERCHE SCIENTIFIQUE, ECOLE POLYTECHNIQUE, SAFT GROUPE

Affiliations Courtes: [CNRS (FR)], [ECOLE POLYTECHNIQUE], [SAFT]

Descripteurs: Etude2012, VOITURE

CIB: H01M4/36, H01M4/60, H01M10/36

ECLA: H01M-004/134, H01M-004/1395, H01M-004/38, Y02E-060/12B, T01M-010/0525, T01M-004/38

CPC: H01M4/134, H01M4/1395, H01M4/38, H01M10/0525, Y02E60/122

Résumé: The electrode has an active material comprising silicon, whose surface is grafted by an organic group bonded to the silicon by silicon-carbide bond. The organic group is an unsubstituted monovalent hydrocarbon containing of 5 to 12 carbon atoms, or substituted by one to n substituents, selected from the group consisting of halogens, cyano, carboxylic acid, oxyalkylene, polyoxyalkylene, methacrylate, methacryloxy, methacryloyl, mercapto, amino, amide, ureido, epoxy, where n is equal to 4. An independent claim is also included for a method for manufacturing an electrode. (From FR2955709 A1)

Famille: 17014017 Num doc (Numéro interne): 13965

Claims (13) : Claims machine translated from French

CLAIMS

1. Electrode including an active matter including of the silicon whose surface is grafted by an organic group related to silicon by a Si-C connection.
2. Electrode according to claim 1, in which the organic group is a monovalent hydrocarbon not substituted container from 1 to 15 carbon atoms, preferably from 5 to 12 carbon atoms; or possibly substituted by for n substituents, preferably selected in the halogenous group including: cyano, carboxylic acid, oxyalkylene, polyoxyalkylene, (meth) acrylic, (meth) acryloxy, (meth) acryloyle, mercapto, amino, amide, ureido, epoxy; with N equal to 4.
3. Electrode according to claim 2, in which the monovalent hydrocarbon is selected among the alkyl groups, cycloalkyle, aryl, aralkyle, alkenyle.
4. Electrode according to claim 3, in which the monovalent hydrocarbon is an alkyl group, preferably in C5 with C12.
5. Electrode according to the claim 4, in which the alkyl is the decyle - (CH2)9-CH3.
6. Electrode according to claim 2, in which the monovalent hydrocarbon is an alkyl, preferably in C5 with C12, substituted by a carboxylic acid group, preferably in final position of alkyl.
7. Electrode according to the claim 6, in which the alkyl substituted by a carboxylic acid group is -CH2=CH-(CH2)8-COOH.
8. Electrode according to one of the preceding claims, in which the active matter understands a silicon alloy.
9. Electrode according to the claim 8, in which the silicon alloy contains at least an element chosen in the group including carbon, germanium, the tin or a mixture of those.
10. Electrode according to one of the preceding claims including a binder and carbon.
11. Electrode according to one of the preceding claims, which is a negative electrode of an accumulator of type lithium-ion.
12. Accumulating lithium-ion including at least an electrode according to one of claims 1 to 11.
13. Manufacturing Process of an electrode according to one of claims 1 to 11 including the stages of:
 - a) cleaning of the surface of a silicon material or a silicon alloy;
 - b) deoxidation of surface;
 - c) grafting of an organic group on surface;
 - d) deposit of the product obtained at the stage c), possibly mixed with a binder and carbon, on a conducting support.

Claims (16) : 1. 1. withdrawing group com 15. A monomer compos S, P and N, wherein s sulphate and sulphon 16. A monomer compos wherein Rh is a C1-C24 recurring units of formu 1. A rechargeable meta - an anode comprising a - a charge-carrying elec

Claims (17) : 1. Con rate from 1 to 2, 5% in v compound of insertion w characterized in that the metal atom containing at selected in the group for

Résumé: A recharge A recharge an organic polymer cath phenothiazine recurring US2013230771 A1) [OBJ] [0002] The inventi type electronic applanc energy density. The inve cathodes [0084] The inv an object of the present [ADB] Actually, polym capabilities, and a pollu phenothiazine ring, it is and further possessing (e.g. with lithium calc incorporated into the ne partly related to the ne

Famille: 38521551 I

Descripteurs: Bons

CIB: H01M4/04

CPC: H01M4/04

Résumé: The as well as a met [OBJ] The prese using this materi a substrate (S) SM) as describ [ADB] On the oth but without con

Carrot licensing

Techno push



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- Patent clusters
- Relevance of protection



Partner search :

- Using same technology
- Using another technology with same applications



Carrot licensing

Techno push



Understand technology

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Choose the best partners

- Portfolio
- Geographical localization
- Companies size
- Previous contracts



Partner search :

- Using same technology
- Using another technology with same applications



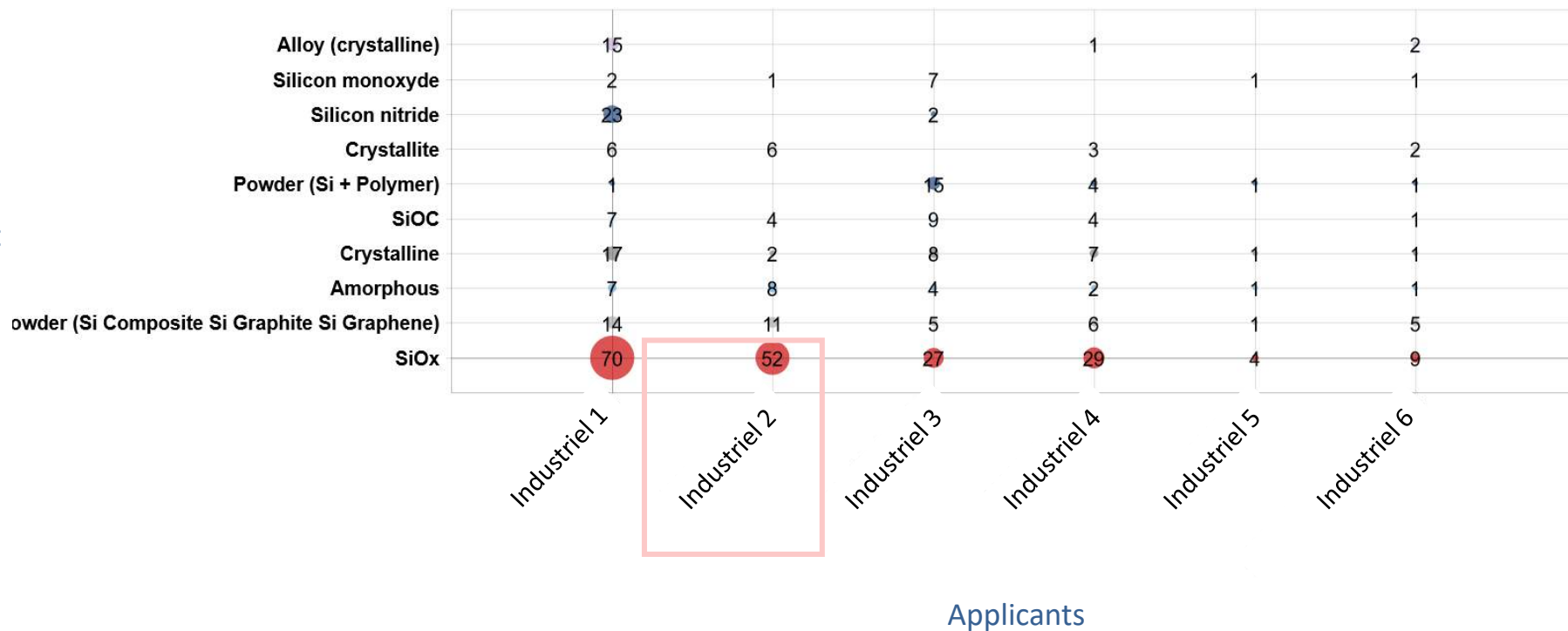
Carrot licensing

Techno push



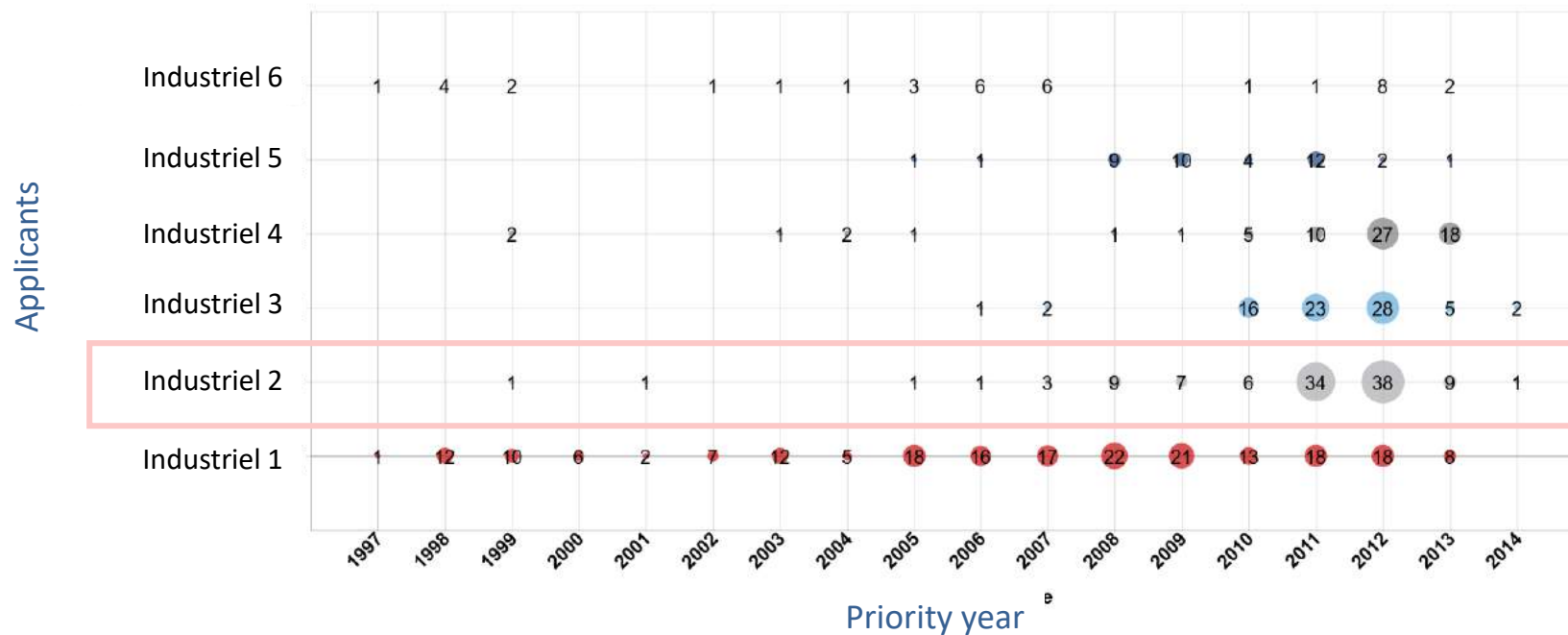
Patents Families related to a specific silicon suitable as anode for Lithium ion batteries for EV or HEV

Silicon type in anode



Carrot licensing

Techno push

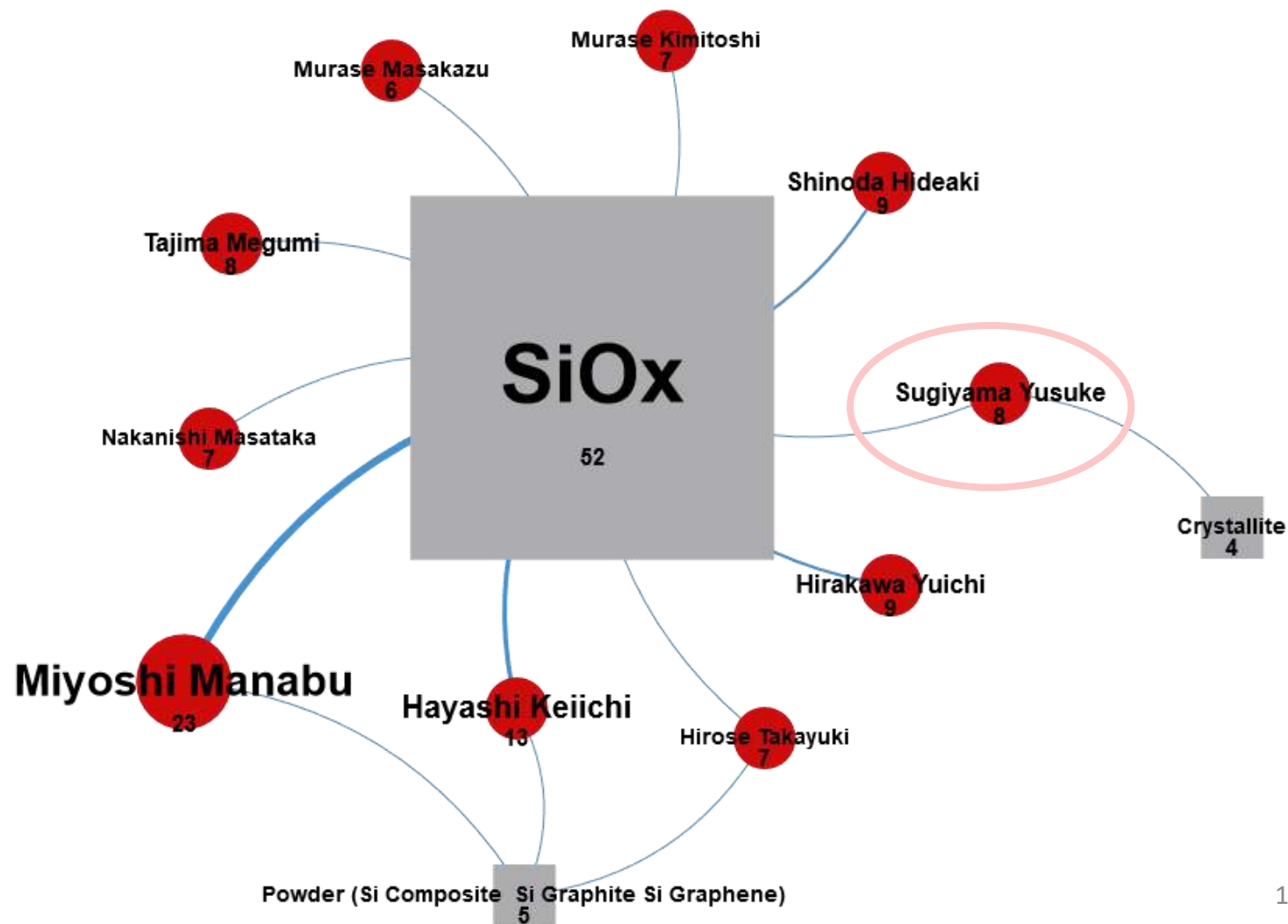


Carrot licensing

Techno push



FIST SA



Carrot licensing

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Choose the best partners

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Partner search :

- Using same technology
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Analyze

- Understand their IP strategies (priority & extension filings)
- Key inventors (KOL)



Carrot licensing

Market pull



Identify industrial needs

- Interview
- Congress
- Professional networks

HIV therapy

→ Latence virale



Develop and test therapeutic agents or immunological strategies to safely eliminate latent infection in animal models and in individuals on antiretroviral therapy. This includes strategies aimed at reversing latency, as well as strategies aimed at clearing latently infected cells.

Carrot licensing

Market pull



Identify industrial needs

- Interview
- Congress
- Professional networks



Search laboratories

- Core competencies: patents, scientific publications, projects

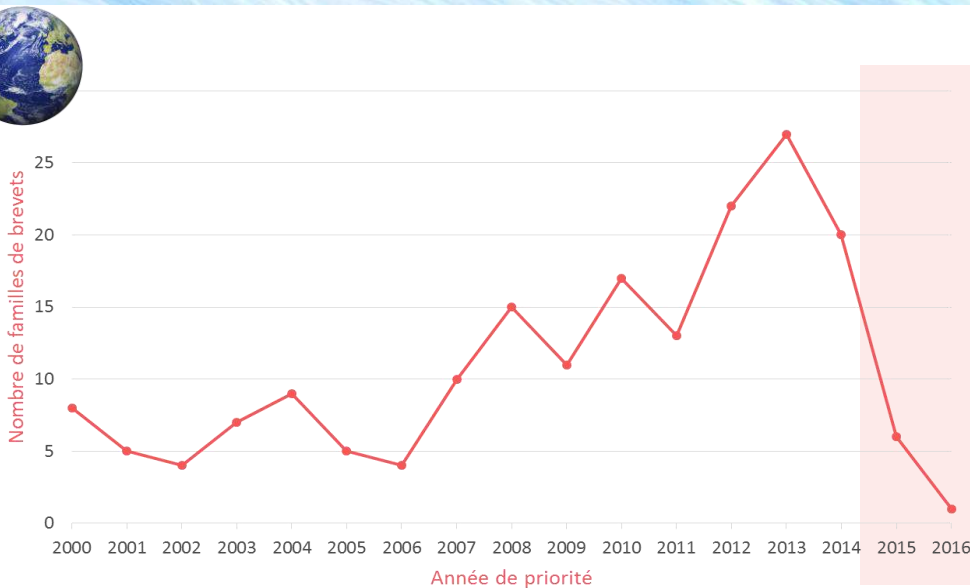


Carrot licensing

Market pull



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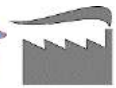
CAGR 2000 2014 : +7%



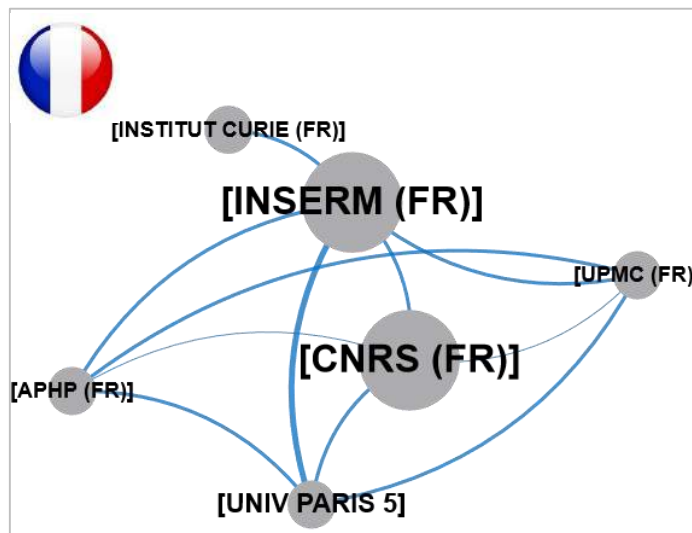
CAGR 2000 2014 : +9%



CAGR 2000 2014 : +5%



CAGR 2000 2014 : +4%

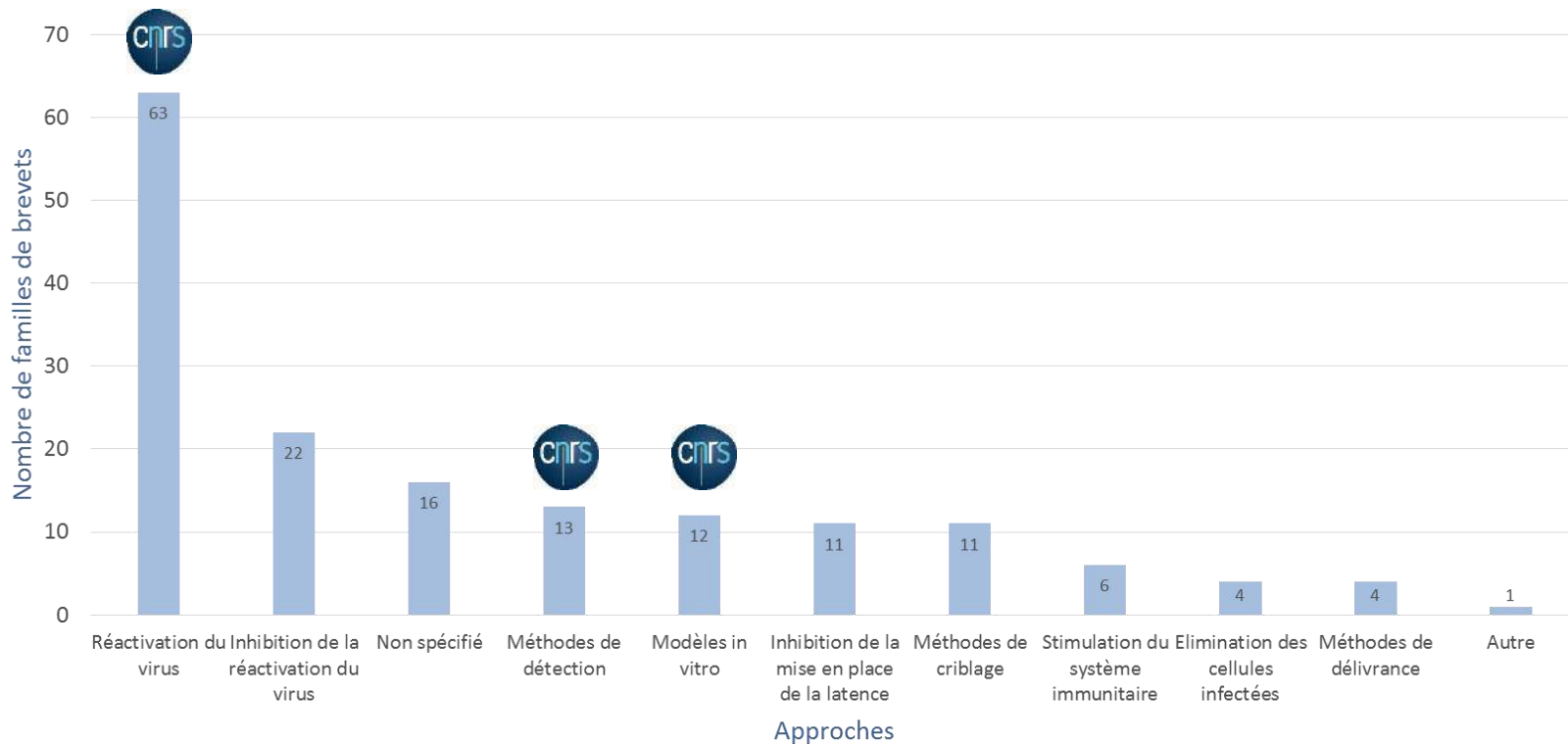


Carrot licensing

Market pull



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Carrot licensing

Market pull



Identify industrial needs

- Interview
- Congress
- Professional networks

Search laboratories

- Repertoire of skills : patents, scientific publications, projects



Contract negotiation

- Collaboration
- Licensing
- Consulting team
- ...



 Carrot licensing : Technologies management

Stick licensing

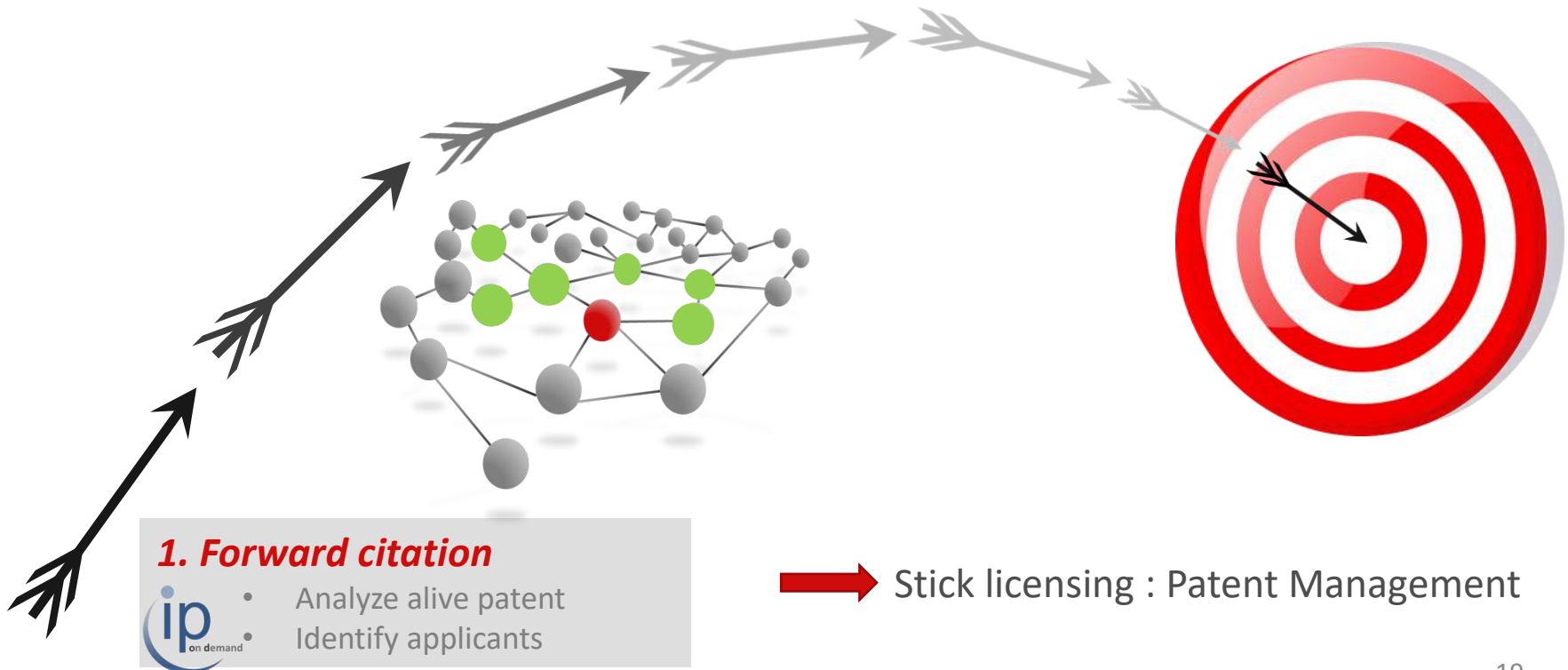
2. Audit of portfolio

- Dependence on existing patents.
- Market positioning

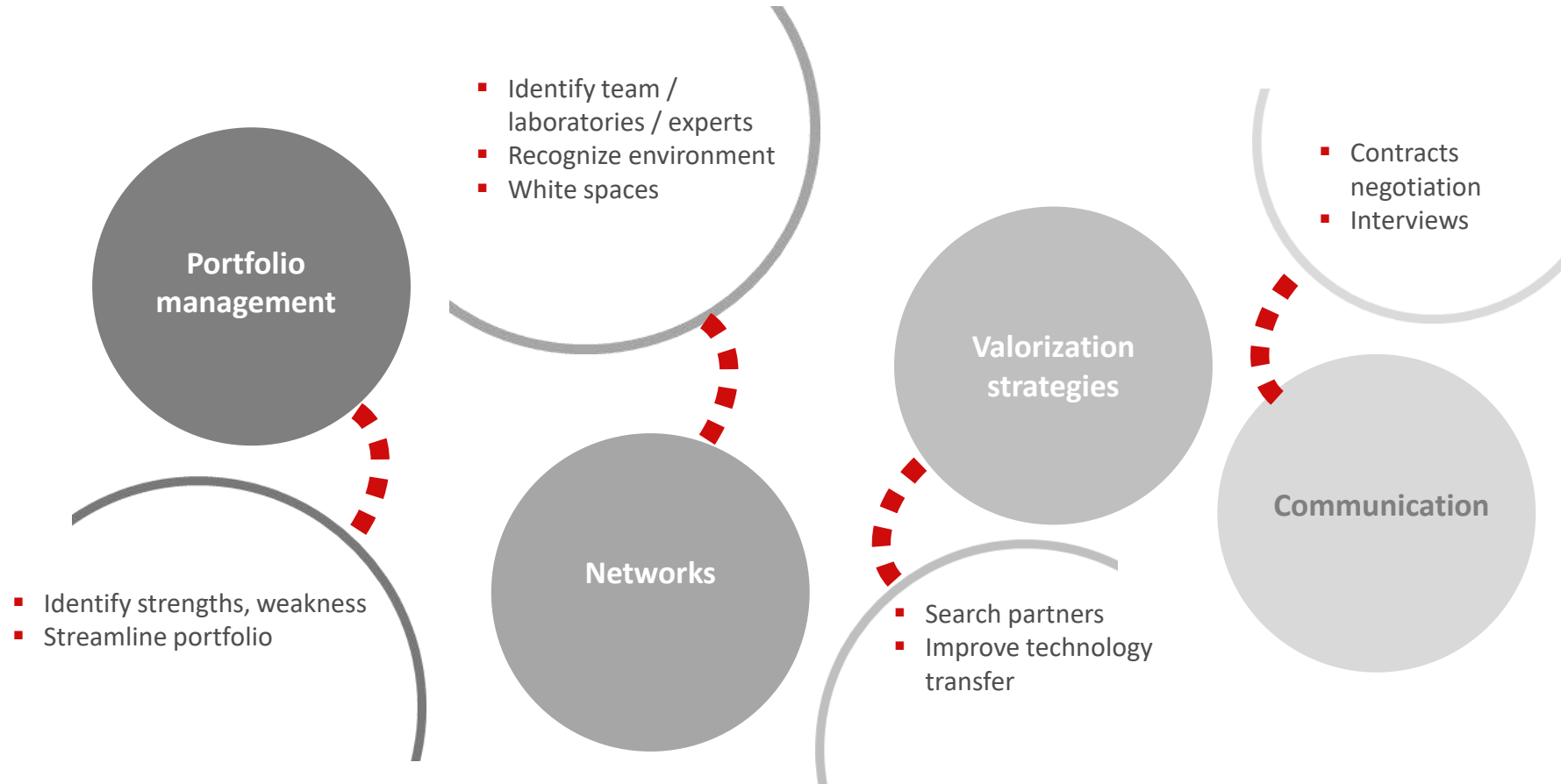


3. Contracts negotiation

- You sell not a technology → freedom to operate



Patent mapping and technology transfer





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Carrot & Stick licensing, PiedType, mars 2012

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