

# ARIAD

ASSET MANAGEMENT

## ARIAD Patent Equity Strategy Profit from Intellectual Property



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# Executive Summary

## Intellectual Property

### ✓ Relevance

- Intangible assets account for the majority (>80%) of the market capitalisation of S&P500 companies
- Patent applications tripled in the last 3 decades
- Products becoming more complex, building upon many patents
- Licensing income from patents becoming more important

### Scientifically Validated Connection to Company Success

- Patents protect innovations
- Patents increase:
  - company value
  - revenue
  - overall profitability

## Patent Data Processing

- Standardised, but complex patent information on various complex processes as a basis
- Is made usable from a database technical point of view (prepared, cleaned and correctly assigned)
- Calculation of scientifically based patent indicators
- The ARIAD company universe is made smaller by means of filter processes
- Universe basis:
  - company (mkt. cap. > €200 million) from "MSCI Developed Countries"

## Outperformance from micro, small & mid cap „hidden champions“

- Clear outperformance in the Europe and Japan/Pacific regions
- Main sectors: industry, health/pharmaceuticals and technology
- Many candidates for inclusion "identified" at an early stage

Since the start of 2015, the ARIAD Patent Equity Strategy has also been very successfully implemented in a **mutual fund**.



## Background & the Strategy

Put the future in your portfolio – today

# PATENT LICENSE AGREEMENT

This patent license agreement (hereinafter referred to as the "AGREEMENT"), is made and entered into by and between : .....  
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..... its principal place of business .....  
..... is an actual or potential smart card competitor of LICENSOR  
..... and on behalf of its AFFILIATED

# Intellectual Property as Indicator

What do these 37 companies have in **common**?



**1. Takeover candidates**



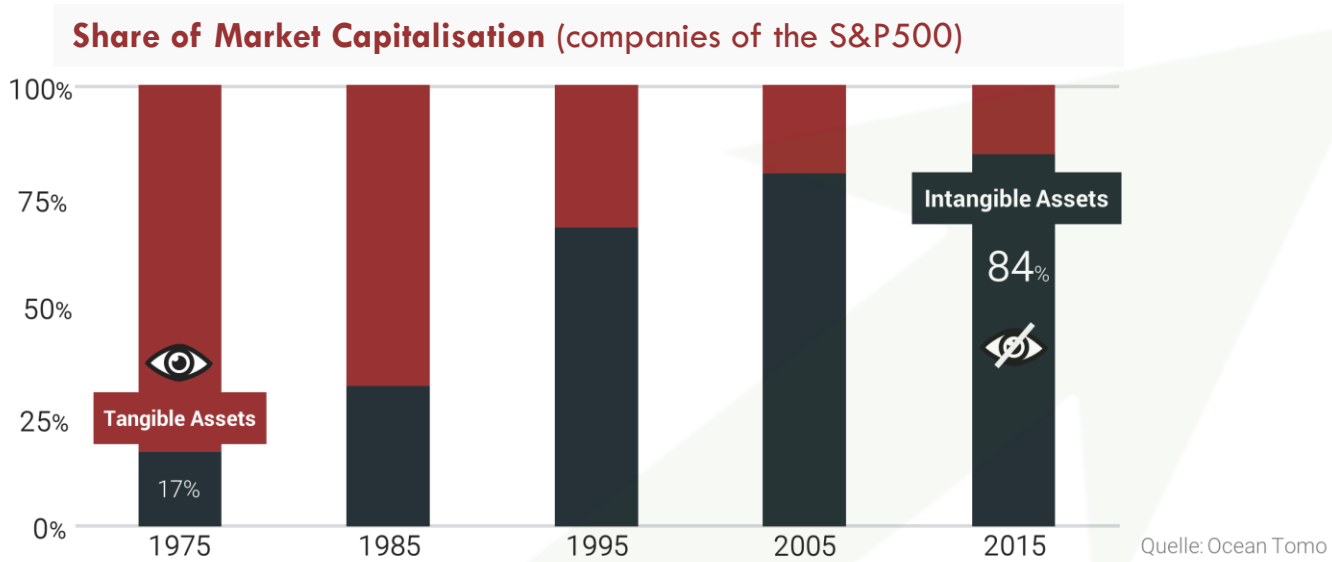
**2. Technological sector leaders**

Leadership protected by **patents**

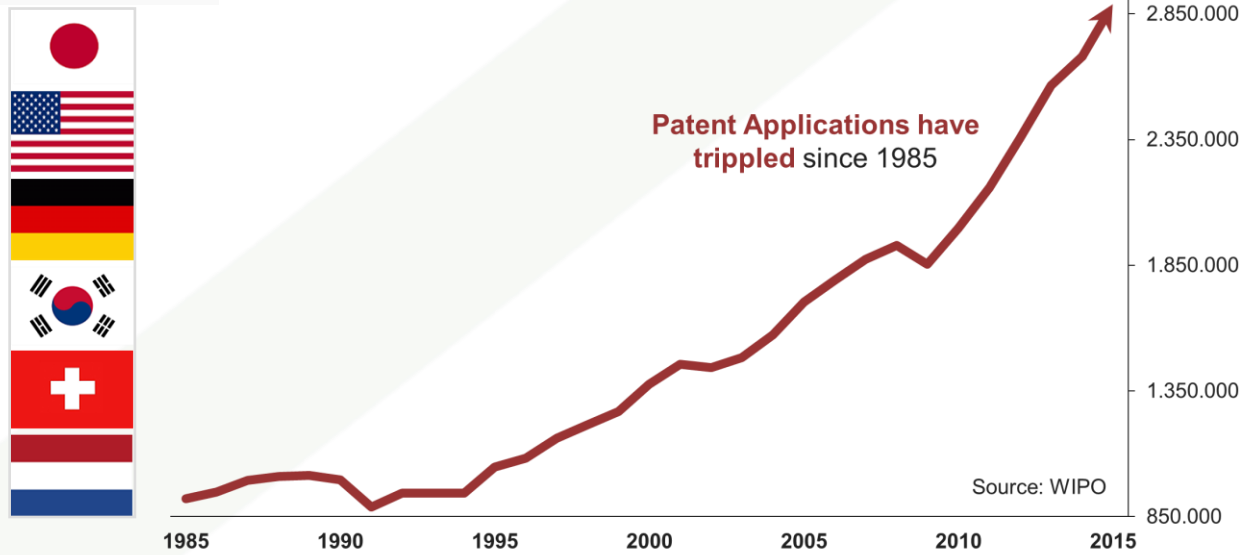


**3. In our portfolio before takeover**

# Intellectual Property is highly relevant



## Top-Innovators



## Reasons for the growing relevance

- 1. Complex products**  
... based on many patents.
- 2. Emerging economies**  
... in eastern Asia are seeking industrial property rights.
- 3. Patent infringement suits**  
... in recent years ensure a more effective use of industrial property rights.
- 4. Licensing income**  
... is becoming increasingly important.

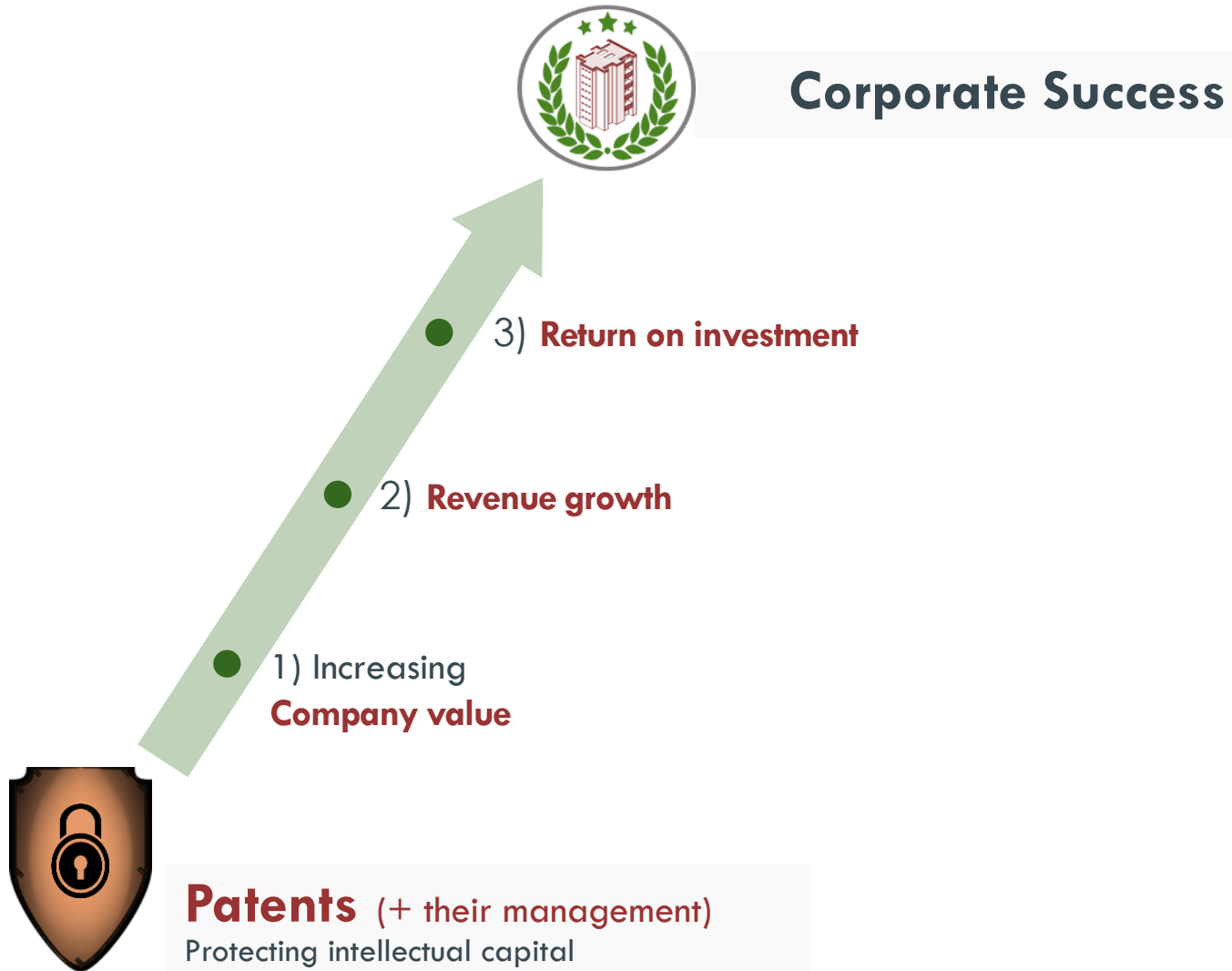
**Company IBM:**

- 1990: USD 30 million
- 2017: USD **1,193** million

# Patents protect Innovations

... and have a scientifically validated.

**positive influence on a company's success.**



## Scientific confirmation

- 1) Tobin (1969); Wernerfelt u. Montgomery (1988); Lang und Stolz (1994); Bosworth u. Rogers (2001), Lee u. Grewal (2004); ...
- 2) Powell u. Dent-Micallef (1997); Spanos u. Lioukas (2001); Baum u. Wally (2003); Wiklund u. Shepherd (2003); Desarbo et al. (2005); ...
- 3) Penner-Han u. Shaver (1995); Baum u. Wally (2003); De Carolis (2003); Tanriverdi u. Venkatraman (2005) ; ...

## ... also of the ARIAD patent approach!



**Prof. Dr. Houdou Basse Mama**  
ESCP Europe (Berlin Campus)

*"Innovative efficiency and stock returns: Should we care about nonlinearity?" – Finance Research Letters (2017)*



**Close cooperation**



**ARIAD patent approach & data**  
... scientifically verified



# How Patents can be analysed

## Patent specifications

... offer standardised,  
complete & up-to-date information

(12) United States Patent  
Maloney

(16) Patent No.: US 8,971,664 B2  
(45) Date of Patent: Mar. 3, 2015

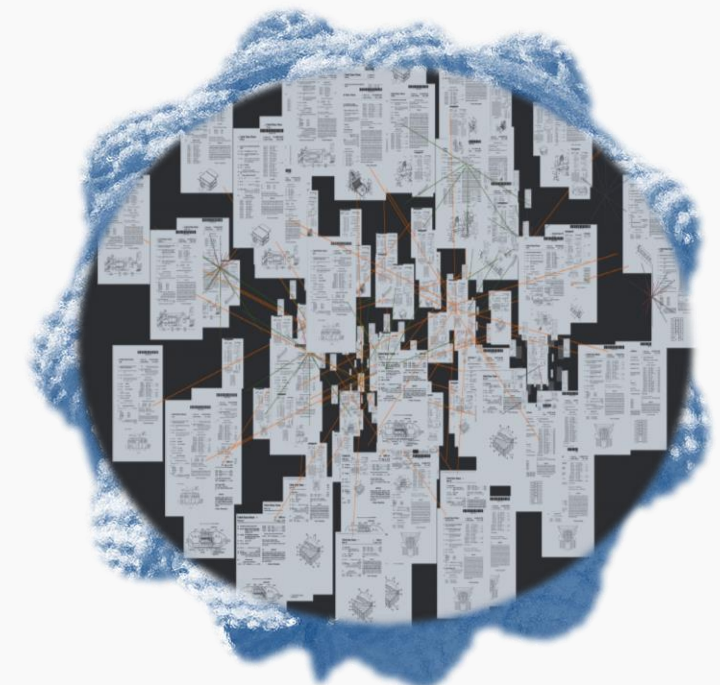
(24) METHOD OF MAKING COMPOSITE IMAGES  
(71) Applicant: Muddy Water Kiosk, LLC, Madison, MI (US)  
(72) Inventor: Stephen Michael Maloney, Midland, MI (US)  
(73) Assignee: Muddy Water Kiosk, LLC, Madison, MI (US)  
(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 156(b) by 0 days.  
(21) Appl. No.: 14/925,918  
(22) Filed: Aug. 18, 2014  
(36) Prior Publication Data  
US 2014/0317999 A1 Nov. 27, 2014  
(37) Robert V.3 Application Data  
(63) Continuation of application No. 13/137,835 filed on Sep. 18, 2011.  
(90) Provisional application No. 61/905,424 filed on Sep. 16, 2010.  
(51) Int. Cl.  
G06K 9/06 (2006.01)  
G06K 9/00 (2006.01)  
G01V 1/02 (2006.01)  
G06K 1/04 (2006.01)  
G06K 1/30 (2006.01)  
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G06K 9/12 (2006.01)  
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G06K 9/90 (2006.01)  
G06K 9/92 (2006.01)  
G06K 9/94 (2006.01)  
G06K 9/96 (2006.01)  
G06K 9/98 (2006.01)  
(57) Abstract  
Methods are disclosed relating to the production of composite images that include steps such as: receiving a set of objects that have a diversity of color from the environment; placing the set of objects within a scene; capturing a set of images of the scene; selecting color to the set of images; assembling a composite image; placing the composite image; making color adjustments and repeating the composite image.  
1 Claim, 1 Drawing Sheet

## Big-Data Chaos

Patents are practically never stand-alone. They **form a network** of forward and backward citations, contradictions and superior patent families.

In combination with the countless variables of a single patent specification, this results in a jumble of information: **Big Data Chaos**.

The challenge is to make this information usable.



## Countless Variables

Von (10) Patent designation [...]

...über (50) technical data[...]

... bis (98) [...] application-date for the extension of the duration [...]

# **From Patents to the Patent Equity Strategy**

## Leveraging Big Data to drive investment returns

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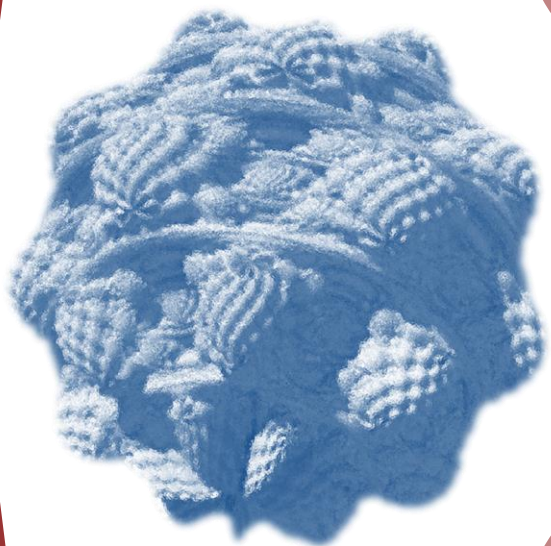
..... is an actual or potential smart card competitor of LICENSOR  
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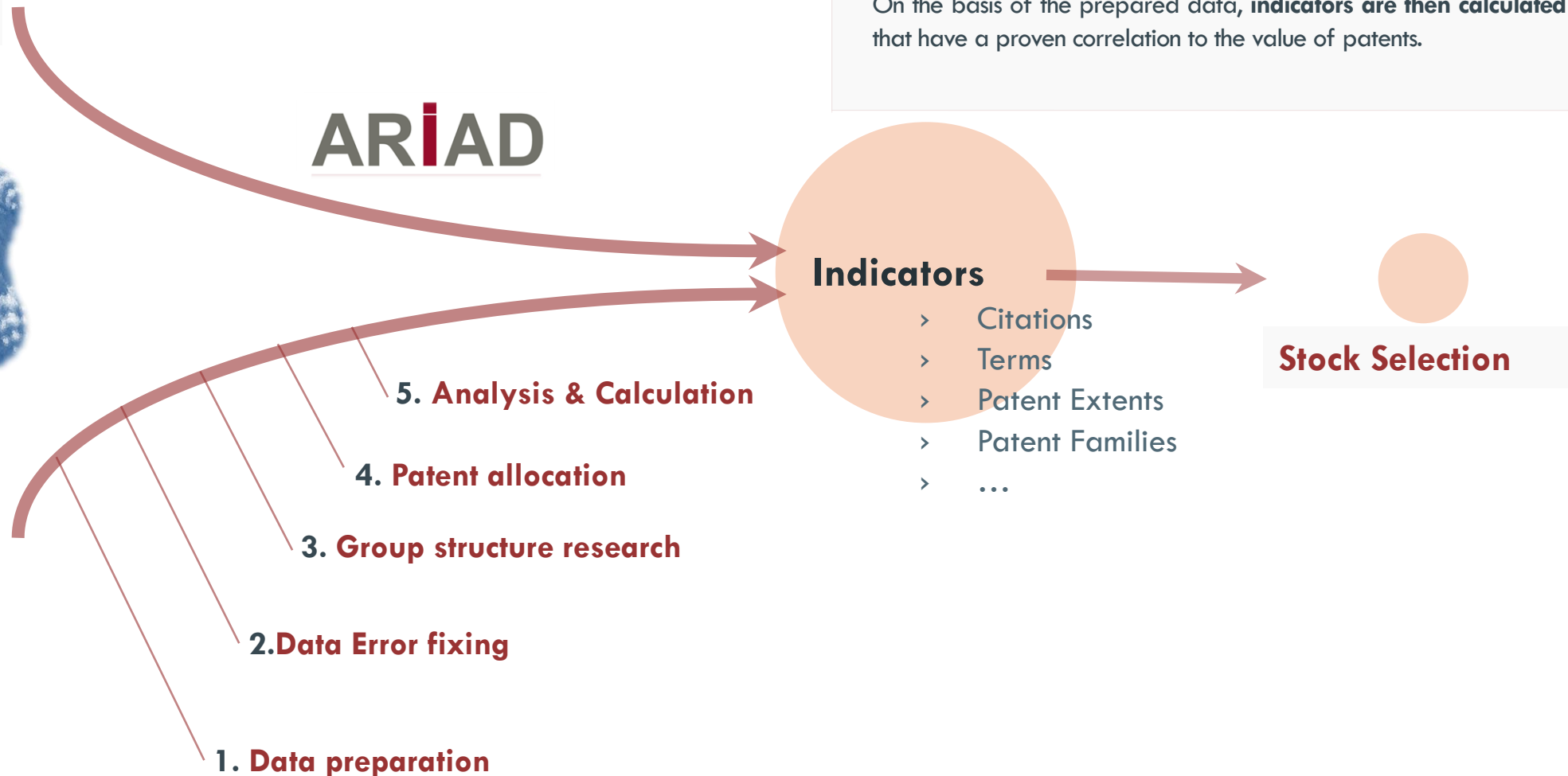
# Making Patent Information usable

## „Big Data“-Chaos

= Information-Overkill



ARIAD



## From patent data to patent indicators

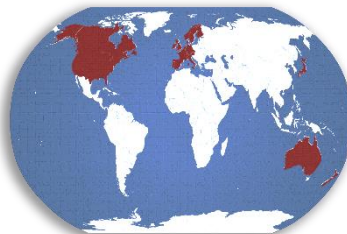
Using various complex **processes (1.-5.)** the patent information is made usable from a technical database point of view, prepared, cleaned and correctly assigned. Here, the **Group Structure Research** in particular is very time-consuming, since, for example, Siemens alone has more than 600 different subsidiaries with patents.

On the basis of the prepared data, **indicators are then calculated** that have a proven correlation to the value of patents.

# The global ARIAD Patent-Universe

## #1: Industrialized Countries

+according to the definition of MSCI  
+ additional filter (freefloat, marketcap)



## #2: Sectors with high patent activity



Utilities



Logistics



Raw Materials

## #3: Patent portfolio-ranking

- ✓ Most innovative companies
- ✓ Mainly micro-, small- und midcap
- ✓ Focus: USA, Japan, Europe

Yearly  
ranking

Quarterly  
rebalancing

ARIAD Patent-Universe

## Big-Data

>80,000,000 patent  
data files

## Patent indicators

- Citations
- Techn. breadth
- Patent families
- Durations
- ...



Ranking

- Quality of patent portfolios (current+historic)
- Adjusted for company size

## ARIAD data processing

1. Researching subsidiaries
2. Patent allocation & data cleaning
3. Computation of patent indicators

## #4: Selection process

- ✓ Investment in **about 100 companies** with highest ranking
- ✓ Consideration of **fundamental and technical data**
- ✓ **No orientation on any benchmark**





# The Strategy at a Glance

- Companies with a **high-quality patent portfolio** receive investment. (mainly small/midcaps)
- Positive side effect: above-average number of **candidates for takeover** in the portfolio - before takeover offers are known on the market.
- Regionally, the investments concentrate on **USA** and **Japan/Pacific** alongside the main focus of **Europe**.
- The main focus of the selection process is the **systematic quality evaluation of the patent portfolio** using many scientifically validated indicators.
- The **selection of regions and sectors** is determined by the quality of the patent portfolio.
- **High degree of diversification.** (approx. 100 titles in the portfolio)
- **Items are held in the medium to long term.**
- Adaptation according to ranking
  - "Opportunistic" transactions possible during the year
  - No currency hedging

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..... an actual or potential smart card competitor of LICENSOR  
..... and on behalf of its AFFILIATED  
..... the "Parties".





**Results of the Strategy:**  
Outperformance, especially by small & mid cap stocks

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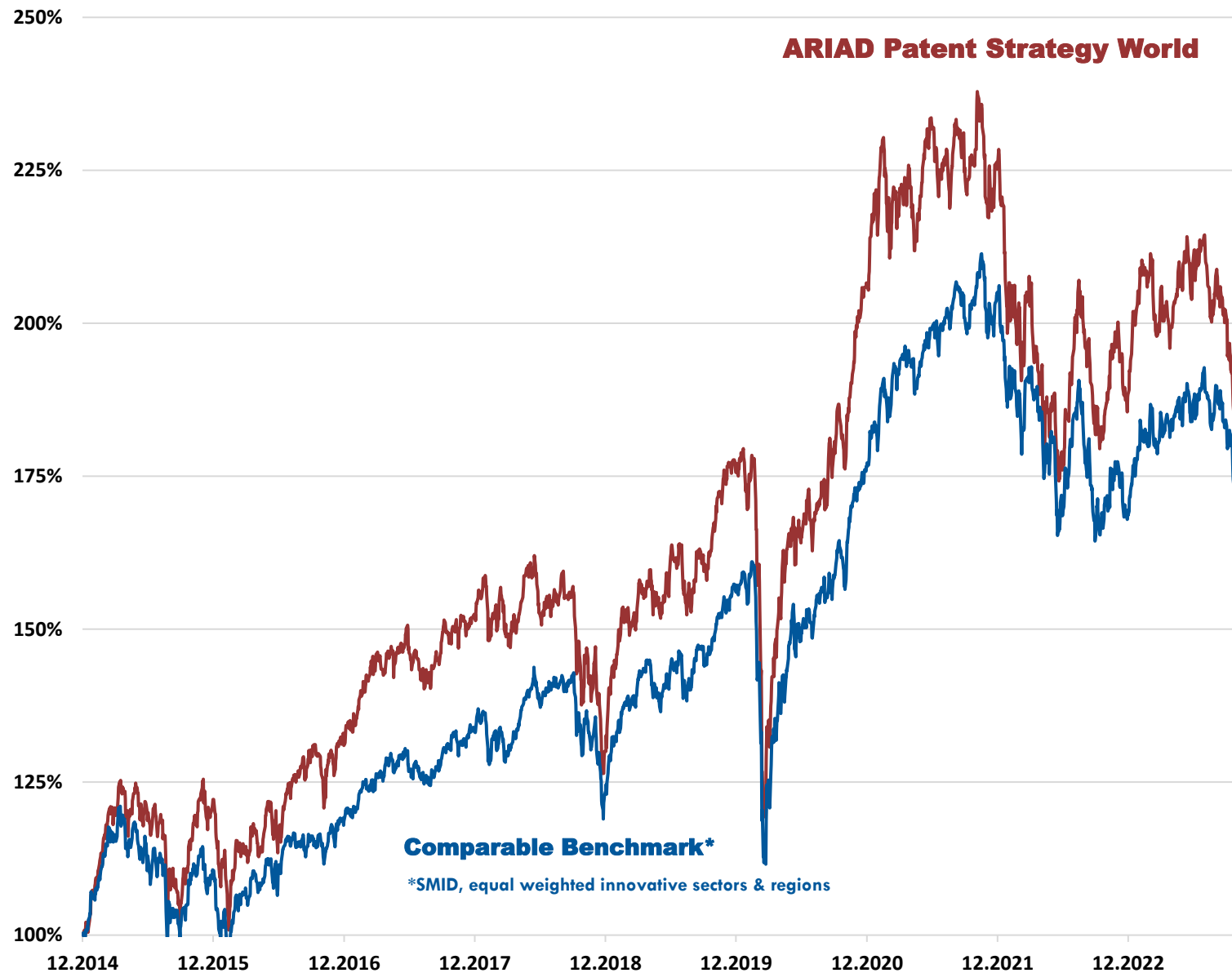
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# Performance of the „World“ Patent Strategy: Multiple Track Records Prove the Added Value



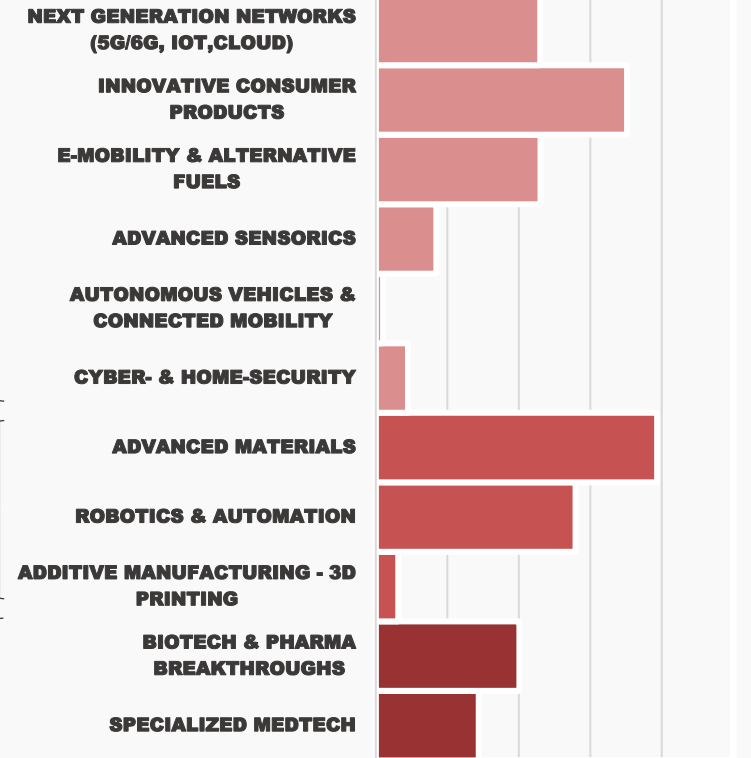
Quelle: ARIAD - Updated 10/31/2023

## TECHNOLOGY LEADERS IN MEGATRENDS IDENTIFIED BY PATENT DATA

Digitalization of Everything

Smart Industry

NextGen Healthcare



share of portfolio: 0% 5% 10% 15% 20% 25%

Quelle: ARIAD - Updated 10/31/2023



## Global Equities Small&Midcap

rank 1: 1-year performance

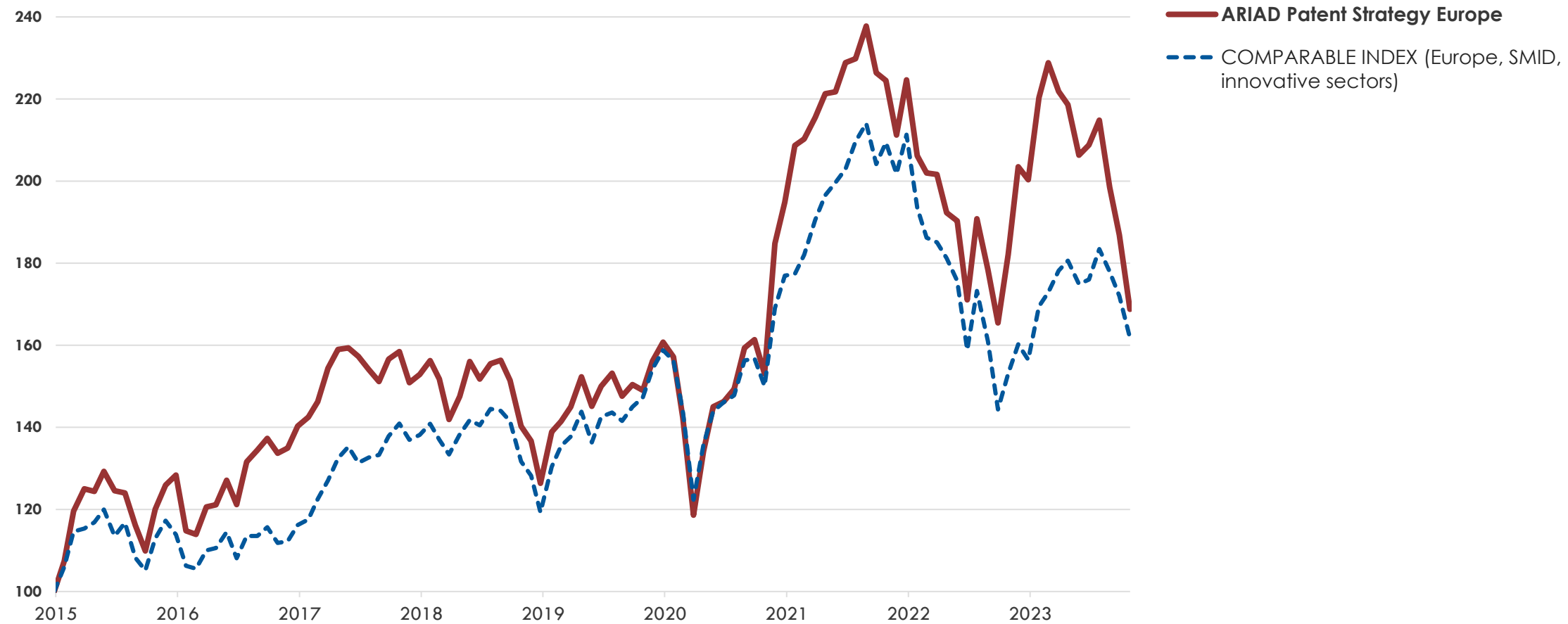
rank 2: 3-year performance

rank 2: 5-year performance

Awarded to the **Monega ARIAD Innovation R** that is based on ARIADs Patent Strategy



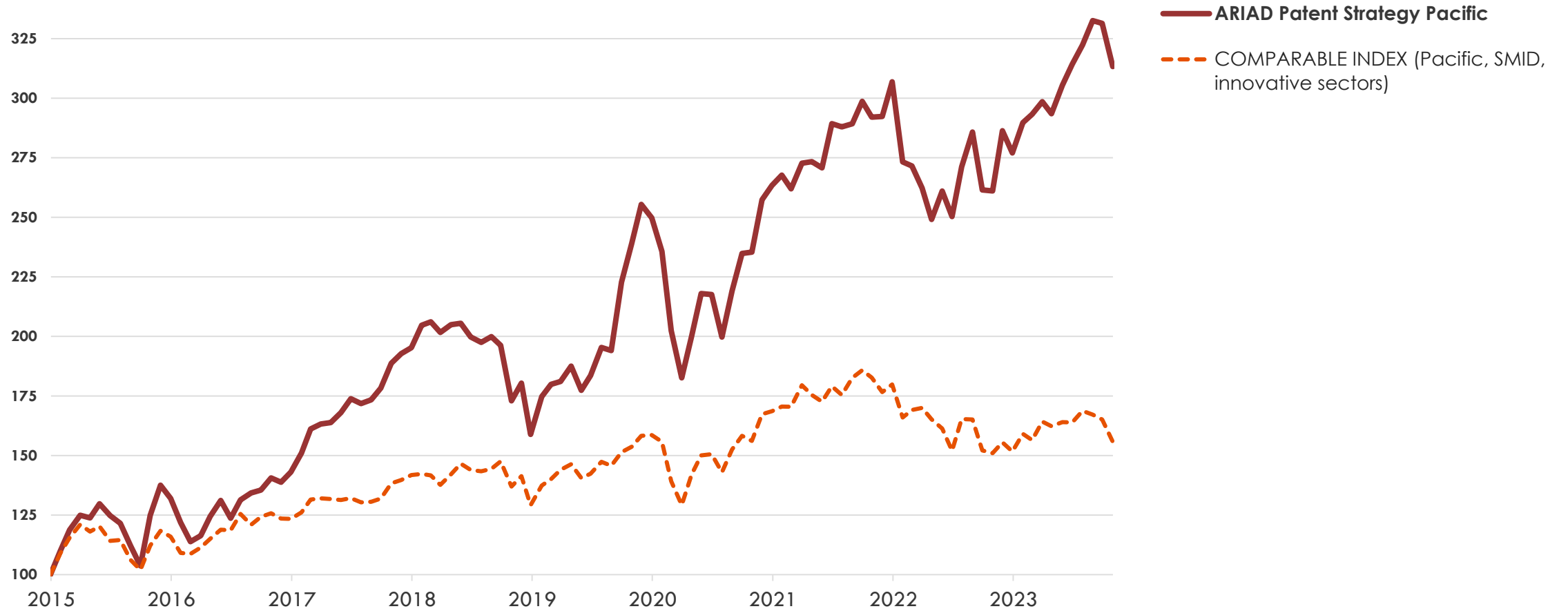
Main Sector - Industry







Main Sector - Industry





Main Sector - Health Care



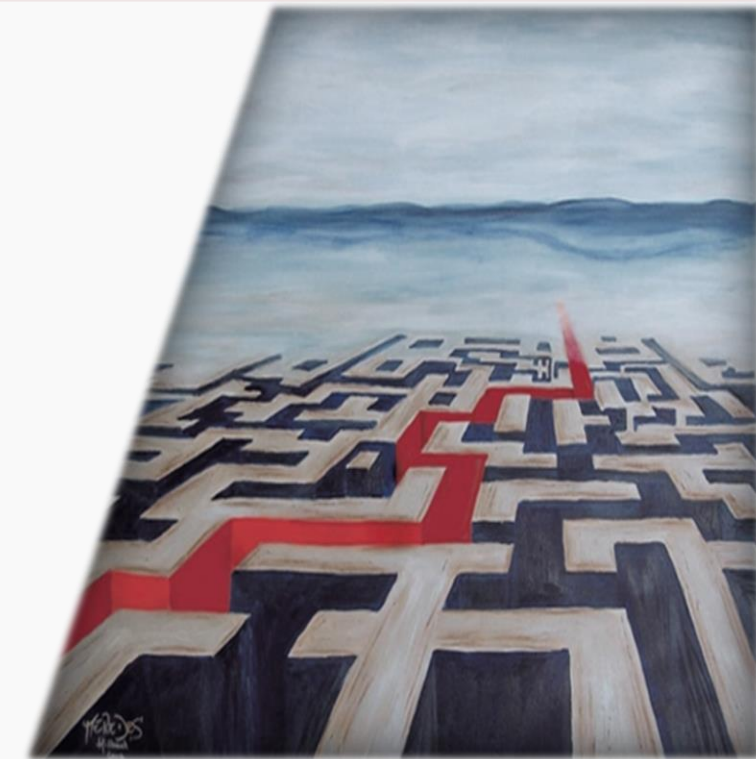
# Further Information

The ARIAD Patent Equity Strategy :  
has been fully implemented in a **mutual fund** since 2015:

**Monega ARIAD Innovation** (WKN 532102)

[www.monega.de](http://www.monega.de)

As an institutional investor you can **register for a monthly update**  
on the strategy at [www.ariad.de](http://www.ariad.de) .



## Contact Information

ARIAD Asset Management GmbH  
Esplanade 40  
20354 Hamburg

Telefon: +49 40 180 301 20  
FAX: +49 40 180 301 22  
[www.ariad.de](http://www.ariad.de)



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