



CASE STUDIES OF ISRAELI START-UPS: ORIDION INC. AND MUTUALART INC.

January 2015
Prof. Dan Galai

Why is the Israeli Economy Robust?



- Well diversified economy
 - * by industries
 - * by target markets
- Well trained manpower
- Stable monetary economic policy
- Israel experienced a severe recession in 2001-2003 from which it came out much more efficient
- Could not rely on natural resources until 2009
- Venture capital and start-ups
- Gas discoveries

What makes Israel a Start-Up Nation?



Education

The Army

Past experience

The business culture

Government support

The financial environment

The Case of Oridion Inc.



Oridion Inc. (initially Spegas)



- **Worldwide market leader and innovator in CO2 monitoring (Capnography)**
- **Established in 1987, based on know-how of the Physics Dept. at Hebrew University, to detect CO2**
 - **by means of IR detection.**
- **Initial applications:**
 - **Medical**
 - **Agriculture**
 - **Air pollution control**
- **Decision to focus on medical applications in EU and surgeries**

Oridion-2013



- **Worldwide market leader and innovator in CO2 monitoring**
 - Breakthrough technology & deep IP
 - Serving multiple medical environments
 - USA – Global commercial activities
 - Israel – Corporate / R&D / Manufacturing
 - 150 employees
 - Established 1987
 - Public, SWX:ORIDN
- **Clinically driven company**
 - Over 95 publications since 2007
- **Large Installed base**
 - 200,000 installed Microstream sockets
 - 3.5M patients monitored with Microstream® in 2009
 - More than 25 OEM Partners and 130 Microstream

The Products



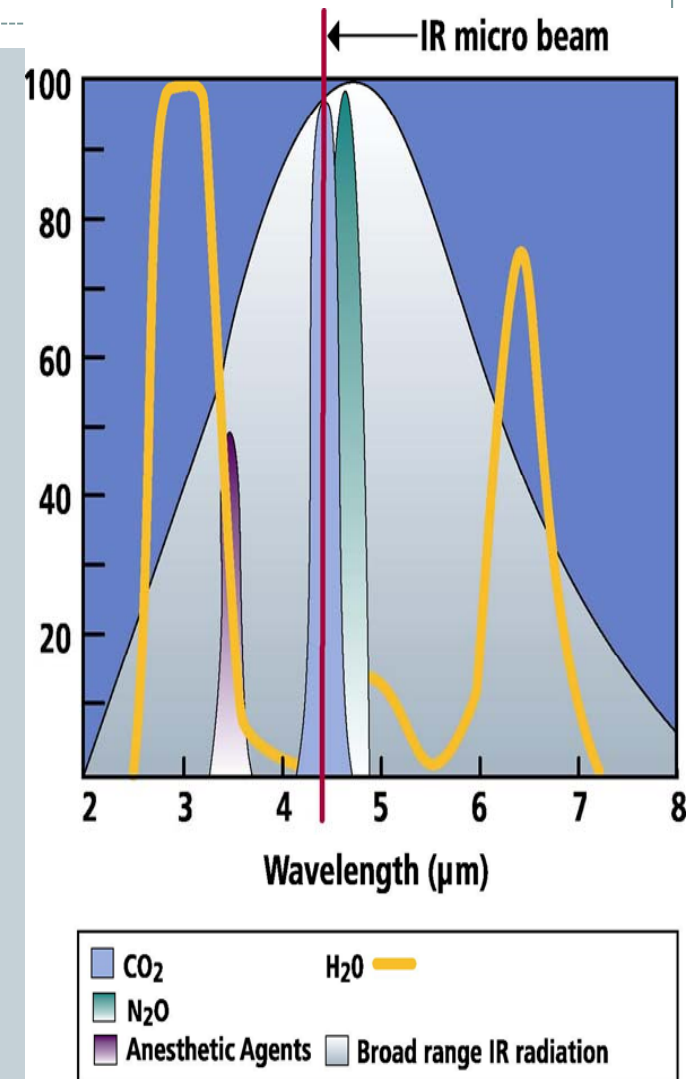
Detection Technology: The Gold Standard



- **Plug and Play: No user intervention needed**
- **Automatically corrects for pressure, temperature changes; automatic zero; no calibration**
- **Always Accurate**
- **Only 100% CO₂-specific IR Technology on the market**
- **Works on Neonates**
- **Low sample flow rate (50 ml/min)**
- **Neonatal airway adapter 0.5 cc dead space**
- **No heat management issues Uses cold IR source**

Microstream® Technology

- Microstream® improves upon
- conventional sidestream technology
- Focused CO₂ specific beam
- Low sample flow rate (50 ml/min)
- Miniature sample cell (15 microliters)



Technology Leadership (42 patents and patent applications)



Hardware

Unique Detection
Technology



**Strong
Intellectual
Property**



Consumables

Unique, enabling,
environment-tailored
sampling lines

Smart Capnography™

Unique in advanced
decision-support tools that
aids the caregiver
and improves patient
outcomes

The Mountain We have to Climb ... Market Segment Overview (US Market only)

□ Total Market Potential:

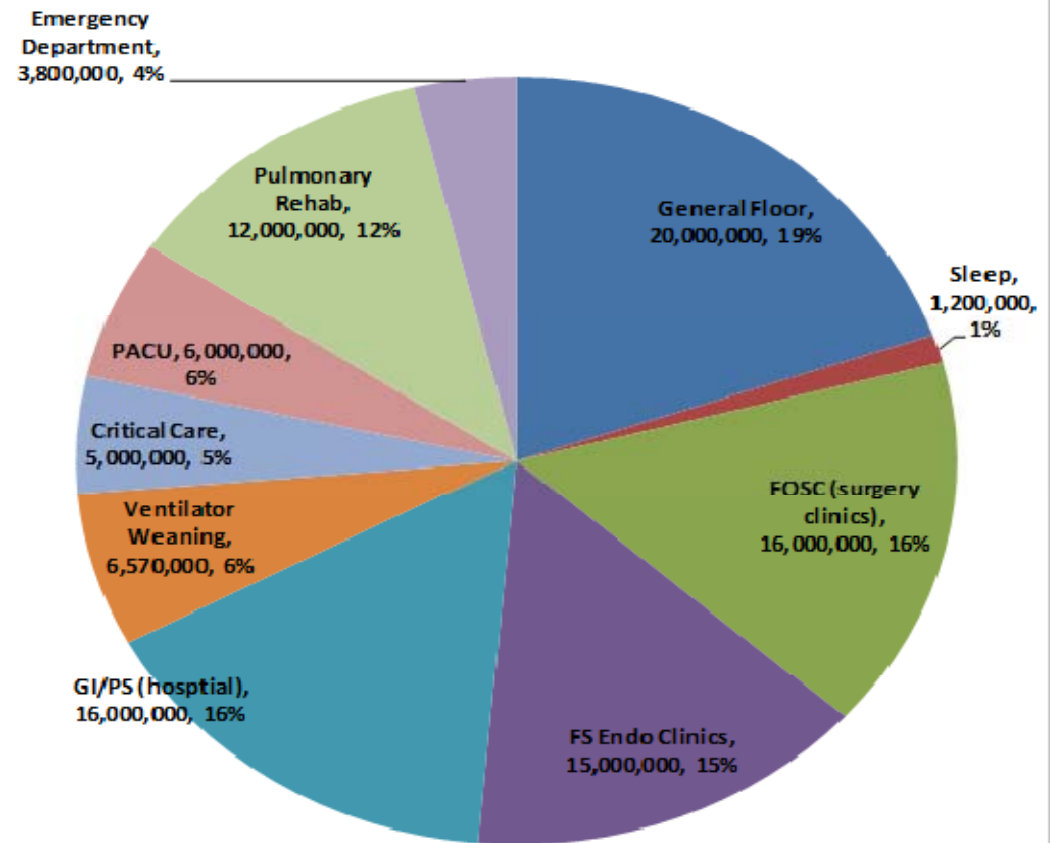
\$1 B/ year

□ supplies

\$2.5 B capital

□ \$250M Mid-term Opty

Capnography Market: Target Opportunities



Oridion Inc. - Funding



- Initial funds from entrepreneur
- Investment in 1987 by MSI Inc.
- Additional funds from Draeger Inc. and HP (Agilant Inc.) and Elta Ltd.
- Angel funding in 1992 (\$2 millions)
- VC funding 1993-1996.
- Failed IPO in Frankfurt
- Successful IPO in Zurich, 2000. Another round 2001. (Angels receive 6X)
- 2013 acquisition by Covidian for \$350 million.



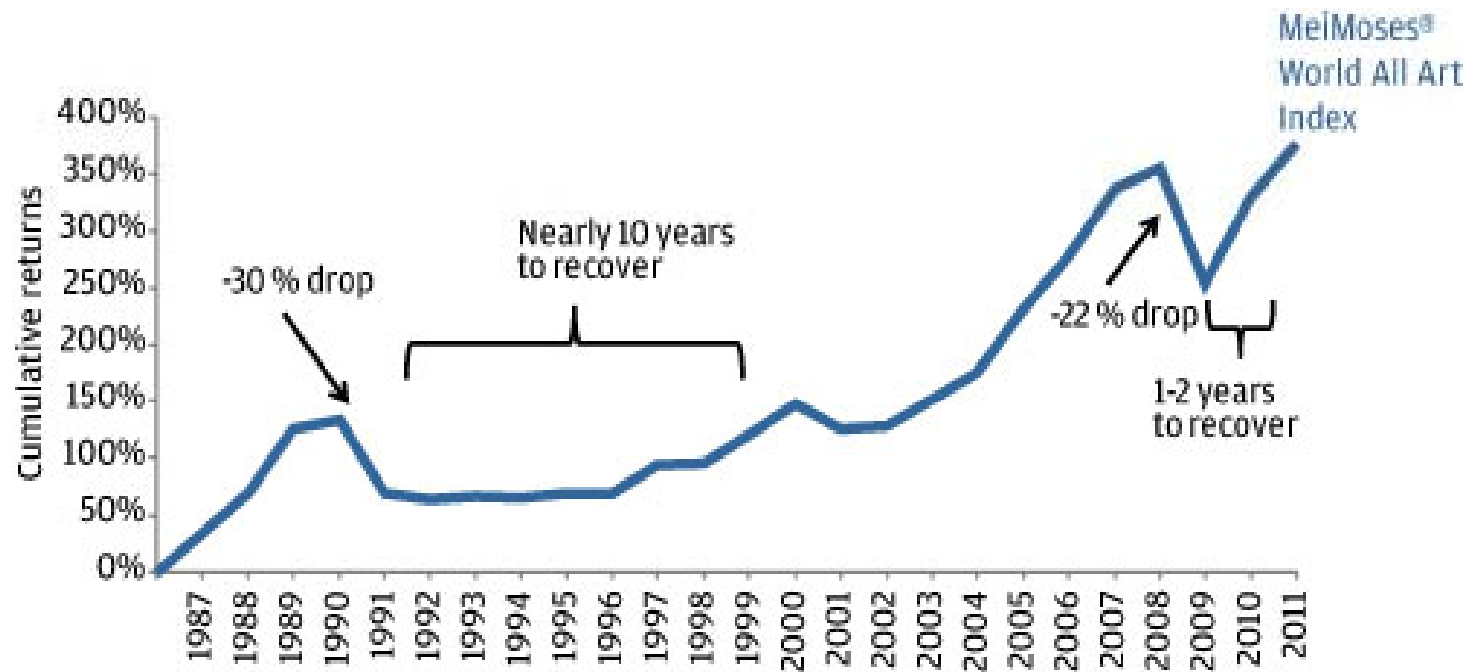
THE CASE OF MUTUALART AND ARTIST PENSION TRUST®

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ART AS AN ALTERNATIVE INVESTMENT

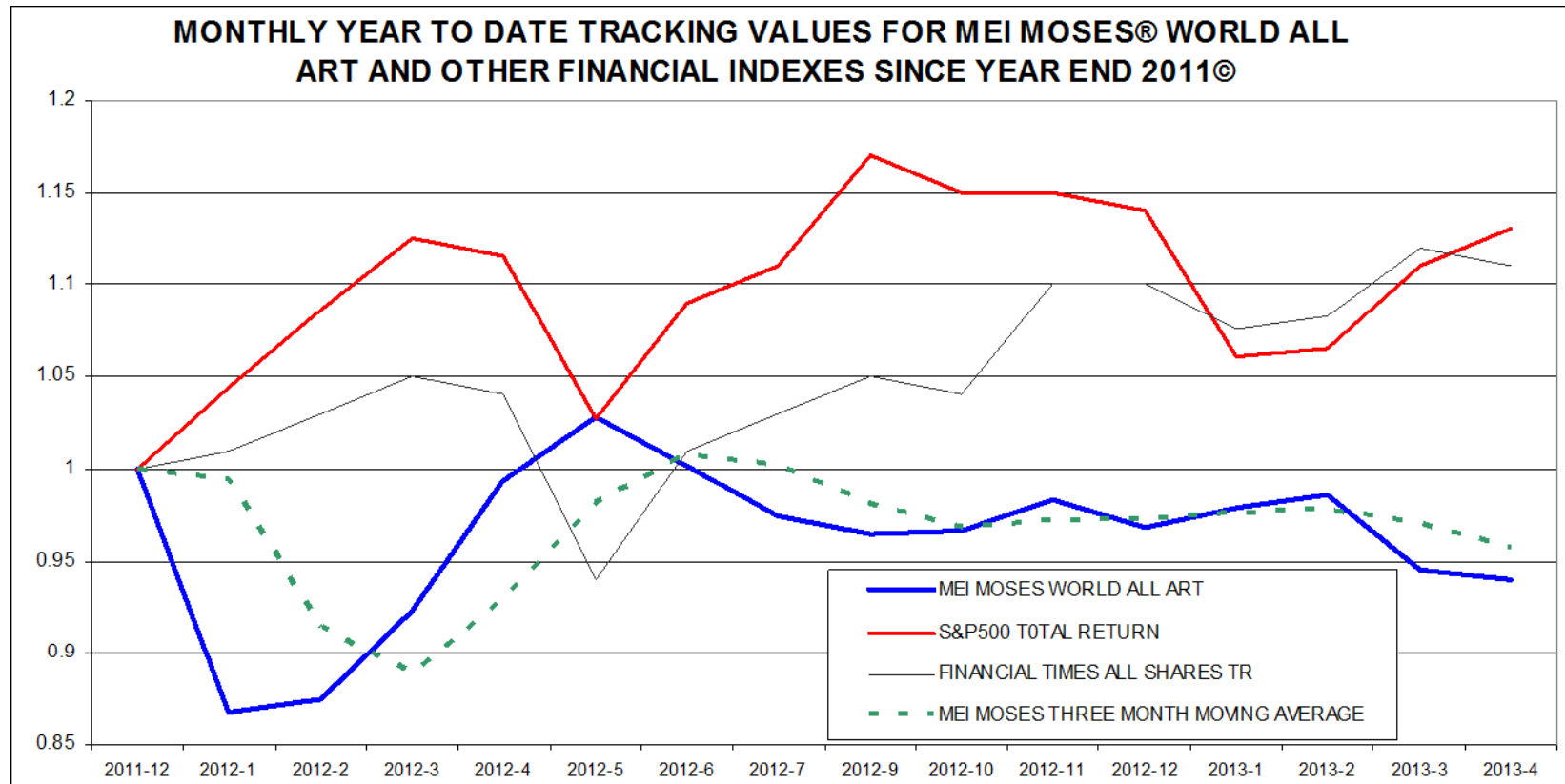
- The total turnover in the global art market is estimated to be over 80 billion dollars in 2014
- The major auction houses accounted for more than 12 billion dollars.
- Christie's sold over \$5 billion in 2010 and \$ 6.3 billion in 2012.
- Sotheby's sales were \$5.8 billion in 2011.

ART AS AN ALTERNATIVE INVESTMENT

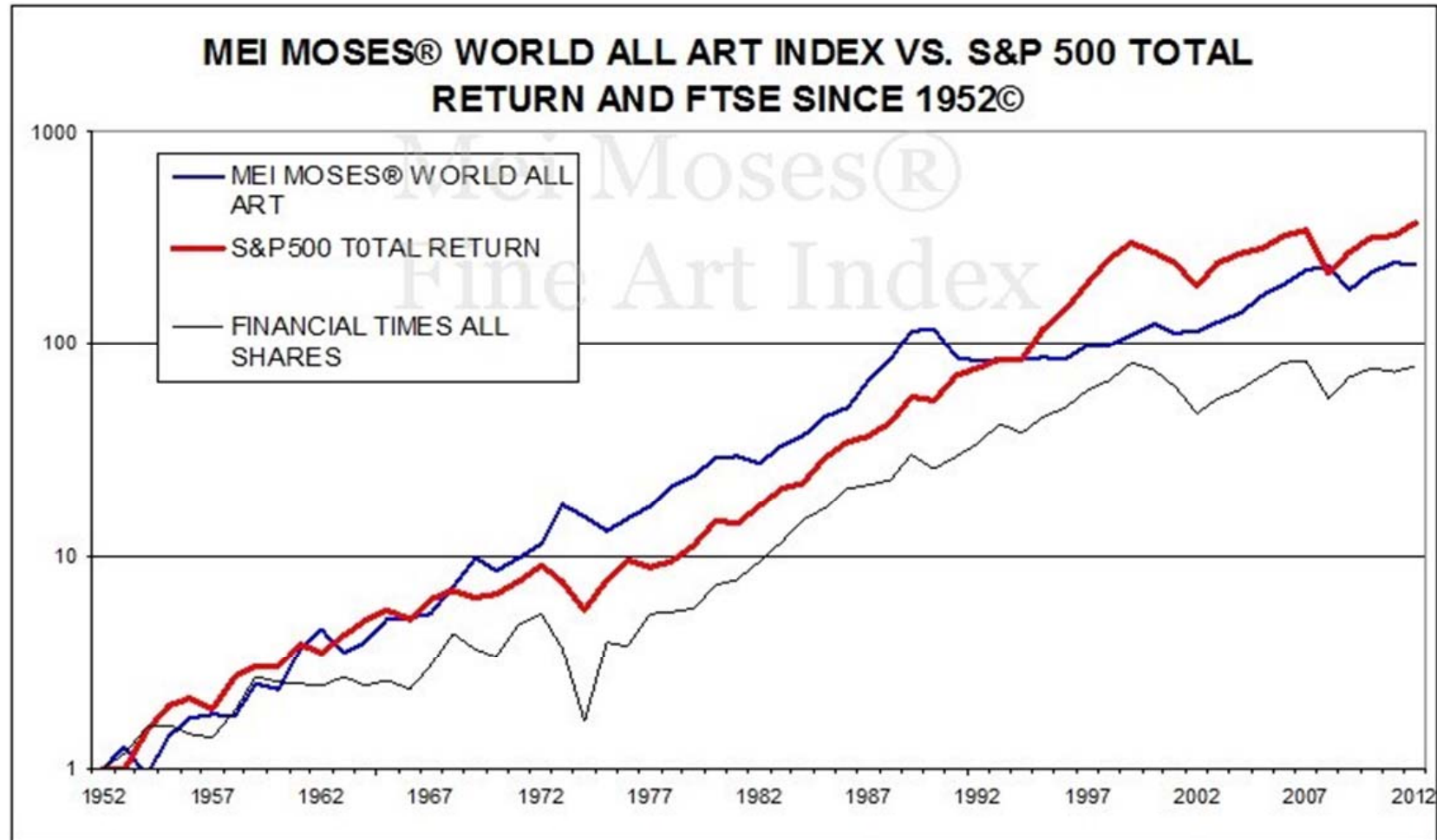


MEI-MOSES INDEX VS. S&P500 AND FTSE

2011-2013



MEI-MOSES INDEX 1952-2012



MUTUALART AND ARTISTPENSIONTRUST (APT)

- MutualArt was established in 2002 in order to provide up and coming artists with pension-like plan
- In 2006 MA was split into 2 subsidiary companies: Mutual Art Services (an Internet company serving all interested in art) and APT Global (pension-like plan for global artists)
- <http://www.mutualart.com/>
- <http://www.aptglobal.org/en/>



FOUNDED 12 YEARS AGO BY

- Professor Dan Galai

- Abe Gray Professor (Emeritus) of Finance and Business Administration at the Hebrew University. A leading economist in the field of risk management

- Moti Shniberg

- A serial entrepreneur, key to the success of several other global business projects

- David A Ross

- Served as the director at Boston's Institute of Contemporary Art, the Whitney Museum, and at the San Francisco Museum of Modern Art



THE IDEA BEHIND APT

- Select up and coming artists for each fund
- Initially 8 funds were established: New York, Los Angeles, London, Berlin, Mumbai, Beijing, Abu Dhabi, Mexico City, covering the globe.
- In each fund there are up to 250 artists within 5 years.
- Each artist makes a contribution of representative art works: 2 works per year for initial 5 years, 1 work a year for next 5 years, 1 work every second year for next 10 years.



THE IDEA BEHIND APT

- The art works are stored but shown on line including on and off- line exhibitions.
- Once a work is sold, 40% of net proceeds goes to the artists, 32% is going to a pool shared by all and 28% is management fee.
- It is a socialist-capitalist systems put together
- In 2013 we open our Global Fund One with up to 600 artists over a 2-year period.



APT STATISTICS

- 2,400 artists
- 75 countries
- 85 curators
- 100 residencies
- 12,000 artworks
- 2,000 artworks added annually

ARTISTS IN CONTEXT

- They barter their work
- They exchange their work with other artists
- They contribute artworks for social causes
- They support up and coming artists

AT THE SAME TIME...

- They are financially insecure
- Most are not saving for the long term
- Most do not have pension plans
- They are mainly exposed to their individual, idiosyncratic risk, and
- There is a high degree of uncertainty about their future artistic and/or financial success



APT: A WIN-WIN SOLUTION

■ For Artists:

- We respect and adapt to artists' behavioural patterns and cultural attitudes
- We provide them with a long-term savings plan
- We give them a larger share of the sale proceeds
- We diversify their personal risk thereby reducing the risk to which they are exposed
- We raise their profile in the art world and increase their exposure
- We provide them with membership in a prestigious community



APT: A WIN-WIN SOLUTION

■ For Investors:

- We are an efficient financial platform from which to invest in art
- We give investors access to emerging artists on a global basis
- We diversify the risks to which they are exposed when collecting individual works of art
- We allow them to benefit from know-how of art world experts



APT INSTITUTE

- A non-profit organization founded in 2013 by the Artist Pension Trust®
- Responds to the need among contemporary artists for global exposure and recognition of their artwork
- Introduces a series of initiatives dedicated to the promotion of contemporary art and the advancement of artists worldwide:
 - APT Loans & Exhibitions
 - APT Global Connect
 - APT Curatorial Sessions
 - APT Art Storage
 - APT Opportunities



APT LOANS

- is a department dedicated to promoting APT's artwork.
- The APT Collection is now the world's largest international art collection boasting 10,000 contemporary artworks by 1,500 artists from 75 countries.
- Our loans program offers access to the collection in order to expose the artworks to international curators at leading art institutions.
- The whole collection is currently being indexed. Through "Artist Account" an artist will be able to control the search for her/his artwork by tagging the

APT GLOBAL CONNECT

- APT Global Connect will provide with access to subsidized or fully-funded residencies around the world, as well as low-rent studios for short periods.
- An artist can connect account and browse residencies and studios in vibrant cultural centers worldwide. We have 100 residencies already signed up.

APT CURATORIAL SESSIONS

- APT Curatorial Sessions helps artists to develop their career and achieve their goals.
- APT offers free private consultation sessions with our leading curators.

APT ART STORAGE

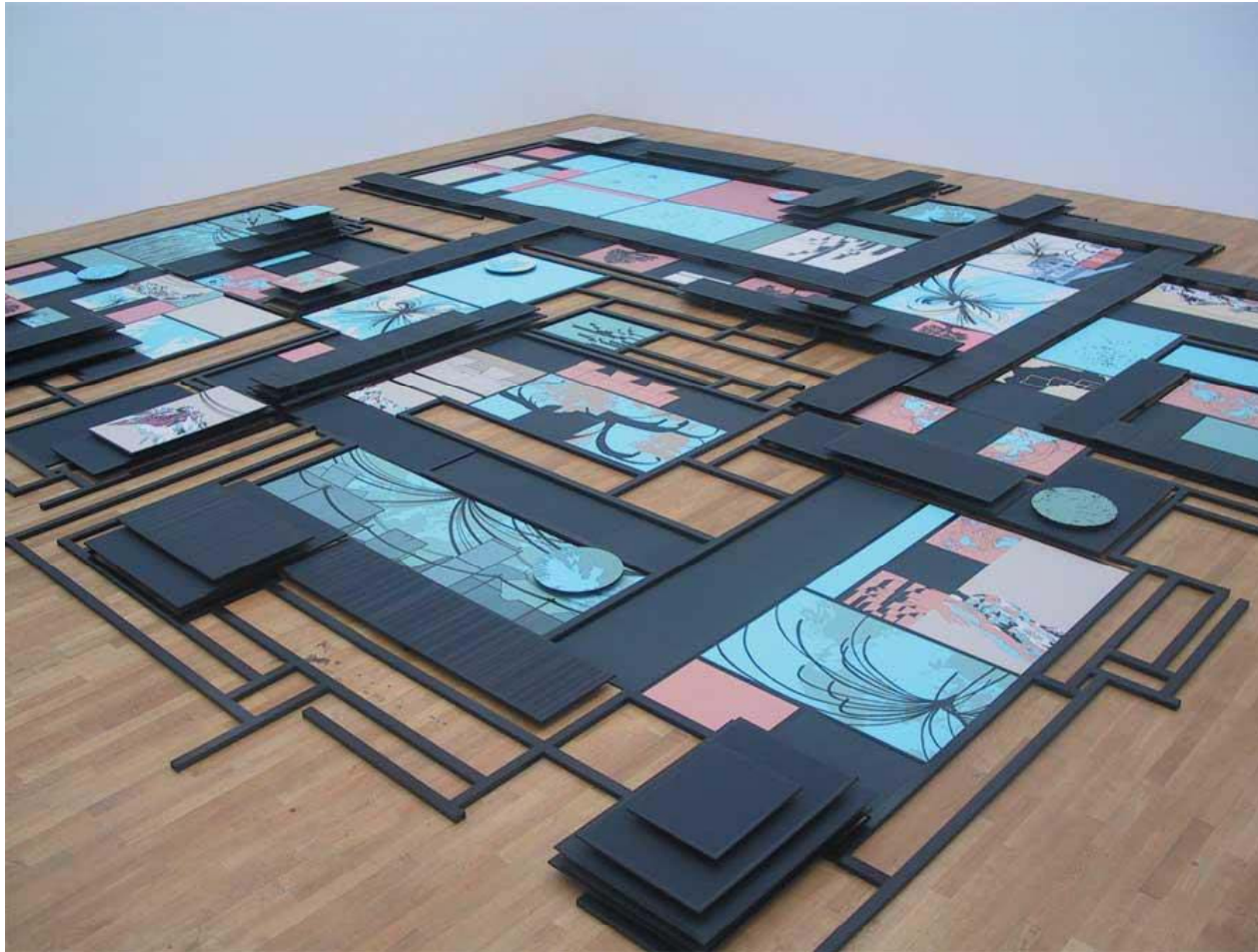
- Storage provides artists with storage
 - APT Art facility when away from home.
- It gives the artists exclusive access to five global storage facilities:
 - Brooklyn, New York
 - Los Angeles
 - Leipzig, Germany
 - Mexico City
 - Hong Kong
- APT artists in need of temporary art storage services outside their cities or countries may use our modern facilities around the world for a reduced fee.

APT OPPORTUNITIES

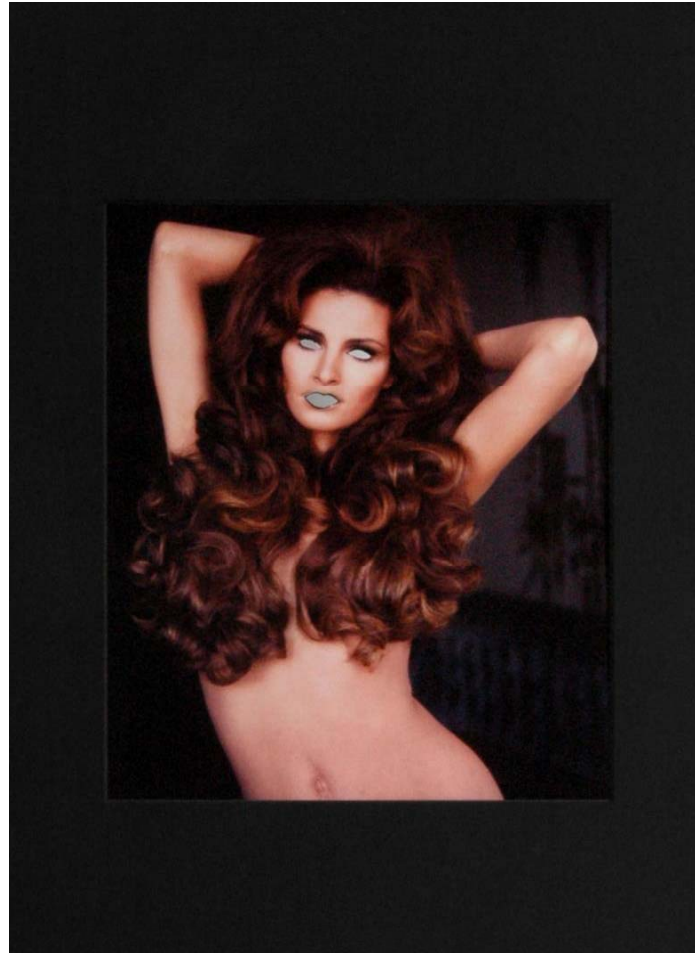
- APT Opportunities is a unique platform that enables artists to search for grants, fellowships, commissions and partnerships to fit their needs.
- Through APT Opportunities, we will also support artists applying for grants and fellowships by providing letters of recommendation and additional documents.



YEHUDIT SASSPORTAS



DOUGLAS GORDON



ANNUAL AUSTRALIAN ART AUCTION SALES (MILLION'S A\$)

