



(limited) REFERENCES

Mining and Refining PERT Patent

JULY 2024

PSYCHE type M (core nude)



ASTEROIDS
BELTS of ASTEROIDS
PERT PATENT in our SOLAR
SYSTEM
PLANETS-MARS-MOON-moons
PSYCHE
and TROYAN asteroids

16 Psyche

Asteroid

16 Psyche is a large M-type asteroid, which was discovered by the Italian astronomer Annibale de Gasparis, on 17 March 1852 and named after the Greek goddess Psyche. The prefix "16" signifies that it was the sixteenth minor planet in order of discovery. [Wikipedia](#)

Spectral type: [M-type asteroid](#)

Mass: 2.72×10^{19} kg

Radius: 113 km

Discovered: March 17, 1852

Gravity: 0.06 m/s²

Discoverer: [Annibale de Gasparis](#)

Orbital period: 1,827 days

NASA's Jet Propulsion Laboratory (JPL) manages the project. SATCAT no. The spacecraft will not land on the asteroid, but will orbit it from August 2029 through late 2031.



PSYCHEE EXPLOITATION

NASA-RAMA project

HELIOTORR project

<https://glycanspacexr-agency.com/asteroid-transportation-and-refining-nasa-rama-project/>

<https://www.ndtv.com/world-news/nasa-funding-project-rama-to-turn-asteroids-into-spaceships-report-1879822>

PRELIMINARY COMMENT

Space adventure for ASTEROIDS (mining and refining) is not

EASY MONEY concept as well as to mine and refine in our Solar System (planets and moons) but feasible under severe conditions.

First of all, the more important is to consolidate the assets and also hold powerful patents at international level, or a legal licenses to do the job.

The reason is quite simple :

The SPACE ACT signed by former President 2015 reveals that American corporates were fully authorized to exploit RESOURCES in our Solar system mainly at MOON.

Also because if counterfeiters generate wealth mining and refining the solar system they might face owners of the patents and paid legal royalties or penalties even the exploitation is out the USA, but with one part of the ROI is done in the financial organization in USA with help of International holdings.

The situation seems to be complicated at legal level.

The patent lawyers will have a considerable job with rich metals PMGs and strategic metals or species as RARE EARTH and ^3He isotope, projects or involved in NUCLEAR FUSION.

The nuclear fusion will be the more interesting tool for the future of Space ship propulsion for major reasons.

All those considerations for the moment are theoretical, but in couple of years this might happen.

Plenty of corporates have decided to open their marketing with FINANCIAL partners for seed funds , because people think mostly financiers that ASTEROID hunting, is EASY MONEY mainly at PSYCHEE.

This is not true , we must consider a realistic BP business plan, and the Law in this matter is quite simple.:

If you got seed funds to begin the job you have to FINISH it, therefore have serious assets, the extraterrestrial mining and refining secured by patents and know-how, must be valued for \$BN or \$Tr.

Only gov institution or big corporates can invest in this adventure as well as NASA JPL -PENTAGON- DoD-DoE- DARPA IARPA- Lockheed Martin-SPACE X- ULA- ESA- Northrop Grumman space- JAXA.

In the special case of PSYCHE another technical challenge or obstacle might be to built on the asteroid the refinery or built in orbital station(near PSYCHE the refinery).

In all cases the cost will be considerable (but feasible), our project is HELIOTORR in order to do the job on place or at ORBITAL altitude.

Another highly serious matter might be the Space carrier PROPULSION, RAMA project is also one interesting spinoff, proposed by JPL-NASA.

We must consider the PAYLOAD of several hundreds of tons (take off from asteroid PSYCHE and landed on EARTH(without crash) RE-ENTRY.

Velocity 7 kms-1 to 10 kms-1.

SPACE X spaceship CARRIER might organize this challenge in order to land without crash.

In conclusion:

The extraterrestrial Mining and Refining finance needs is evaluated at several \$BN., including missions near the asteroid PSYCHE

CONTAMINATION of the DEEP SPACE

Our PERT patent will generate atomic species (nano- pico-femto size) to be introduce in our mass-spectrometry section.

We must recover the unused species in adapted Spheres.

The goal also is to utilize these atomic vapors for FUELS involved in plasma propulsion

One can confirm that the project PERT applied to PSYCHE.

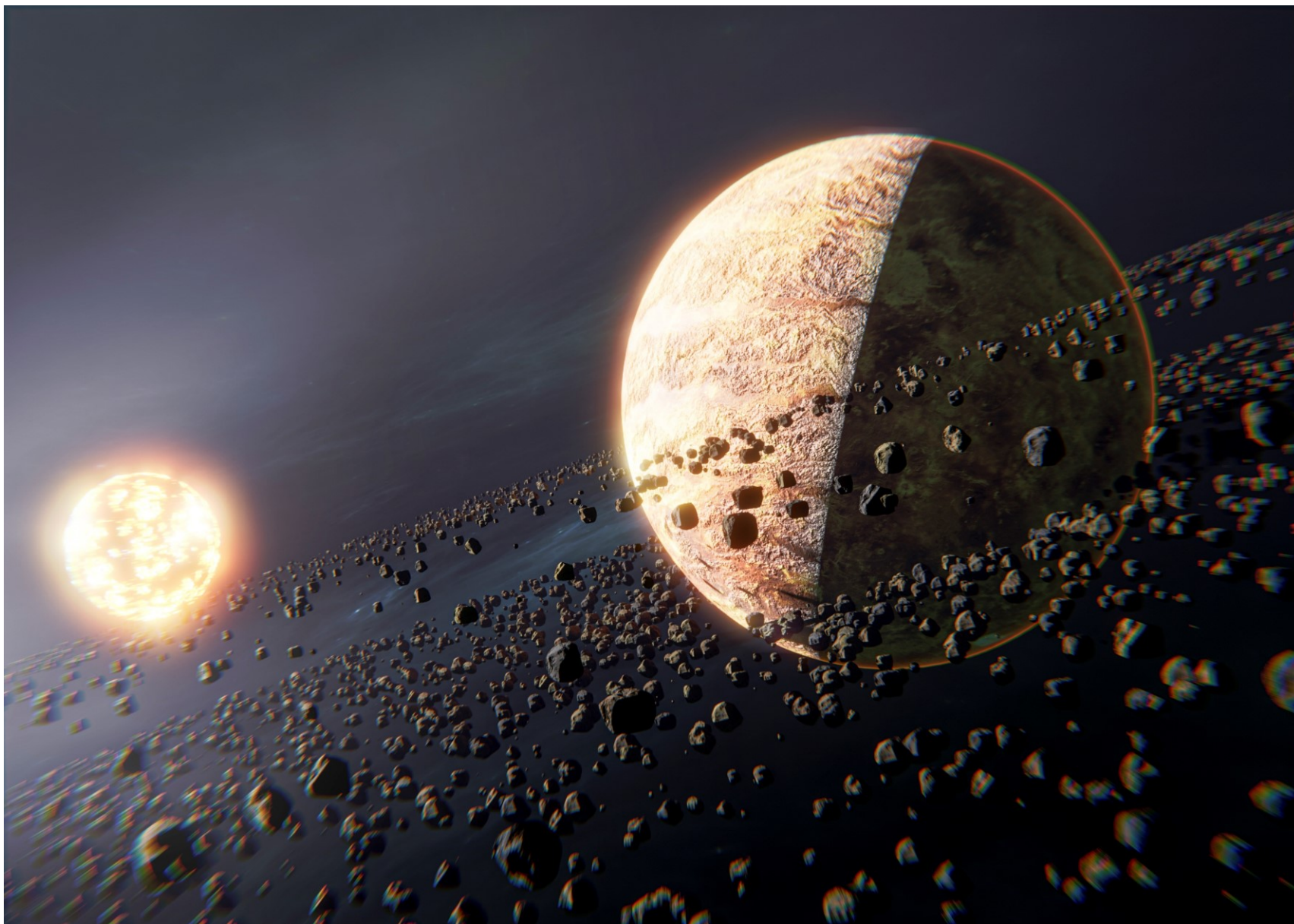
Will be feasible only with AI (Artificial Intelligence) and ROBOTICS.

**HELIOTORR Orbital
Station**



Asteroid Core in activity





Author of the note:

Dr. Christian Daniel Assoun
Physicist,
President. Glycan Space Industries LLC
Owner of the patents

www.GlycanSpaceXR-agency.com

GlycanSpaceXR-Heliotorr@glycangroup.com

Geneva: + 41 79 213 77 18
+41 22 700 58 73

References

- jpl.nasa.gov/missions/psyche
- <https://glycanspacexr-agency.com/extraterrestrial-mining-and-refining/>
- <https://glycanspacexr-agency.com/space-industries-large-structures/>
- [Strategic Resources – Glycan Space Industries Agency \(glycanspacexr-agency.com\)](#)
- [Space Colonization – Glycan Space Industries Agency \(glycanspacexr-agency.com\)](#)
- [Extraterrestrial Mining and Refining – Glycan Space Industries Agency \(glycanspacexr-agency.com\)](#)
- [PLASMA TOOLS FOR SOLAR SYSTEM – Glycan Space Industries Agency \(glycanspacexr-agency.com\)](#)

Author of the note:

Dr. Christian Daniel Assoun
Physicist,
President. Glycan Space Industries LLC
Owner of the patents

GlycanSpaceXR-Heliotorr@glycangroup.com

www.GlycanSpaceXR-agency.com

Switzerland - Geneva: + 41 79 213 77 18
+41 22 700 58 73