Serial #:	PCT/US2024/024794
Title:	**Online Advertising Technology for Artificial General Intelligence (AGI) and SuperIntelligence (SI)**
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SHORT ABSTRACT

Currently, online advertising systems are primarily used to attract and monetize human attention by selling products and services to humans. A superior way to monetize human attention specifically, and the attention of any intelligent entity more generally, is to focus it on solving valuable problems. This invention shows how to capture specific human (or non-human) expertise via online ads and then use that expertise to train advanced AI systems to solve valuable problems using that expertise. Using the invention, Alphabet/Google, Meta, Amazon, Alibaba, ByteDance/TikTok, Microsoft, Apple, TenCent, Baidu, Twitter/X, Spotify, PubMatic, Pinterest, Snap, and other online advertisers can significantly increase their online advertising revenue. The system and methods enable existing online advertising technology to power AI, Artificial General Intelligence (AGI), and SuperIntelligent systems. The technology includes systems and methods that increase AI safety and maximize the chances of human survival and prosperity in the age of AI.

GEMINI PRO SUMMARY

Provisional Patent Application #8 for Online Advertising Technology for AGI and SuperIntelligence

This provisional patent application describes a system for utilizing online advertising to train and improve Artificial General Intelligence (AGI) and SuperIntelligent AGI (SuperIntelligence or "SI"). It overcomes the current limitations of using online advertising primarily to attract human attention and then monetize it via product and service sales by directly connecting the attention of human experts, through online ads, to the problem-solving needs of AI systems, ultimately achieving SuperIntelligence.

The invention describes a collaborative system (and methods) for training and improving AGI/SI systems that involves humans (and other intelligent entities) working together to solve problems. The patent focuses on harnessing human attention and knowledge more efficiently and effectively than the current online advertising model. The invention details a specific type of online ad unit, a Human Attention Spot Market, a Human Agent/Experts Database designed to identify and acquire human expertise, and the methods for customizing and personalizing AI agents. The system also uses human and AI agents to solve problems together via the "WorldThink Tree" - a problem-solving network - depicted in the application.

Novel Features of the Patent

The novel features of this patent include the following:

- **The direct use of human attention to train and improve AGI/SI systems**. While previous AI systems have relied on training with large datasets, this patent proposes a new approach of directly connecting human experts via online ads to AI systems' specific problem-solving needs. This direct approach eliminates the need to collect massive datasets and allows for more focused and efficient training.

- **The Human Attention Spot Market**. This market mechanism provides a platform for humans to sell their expertise and knowledge to AI systems, ensuring that they are compensated fairly for their time and effort. This system, along with the Human Agent/Experts Database, allows for identifying and acquiring specialized knowledge and expertise that is critical for advancing AGI/SI systems.

- **Human values and ethics are used to ensure the safety of AGI/SI systems**. The invention integrates human values and ethics into the design of the problem-solving network, ensuring that AGI/SI systems learn to make ethical and safe decisions as they solve problems.

- **The integration of human and AI agents within the problem-solving network**. This allows for a more efficient and effective system that leverages the strengths of both human and AI intelligence.

- **The inclusion of non-human intelligent entities in the system**. This allows for the harnessing of the attention and knowledge of AI systems themselves, as well as other non-human intelligent entities.

Detailed Description of Each Section of the Patent

1.0 Overview of the Invention: This section introduces the invention and its overall purpose: to use online advertising to train and improve AGI and SuperIntelligence systems.

2.0 Previous PPAs (incorporated by reference): This section incorporates previous patent applications by the same inventor that describe systems for creating Artificial General Intelligence and SuperIntelligence, which form the basis of the current invention.

3.0 Definitions: This section defines the key terms used in the patent, including Artificial Intelligence, Artificial General Intelligence, Advanced Autonomous Artificial Intelligence (AAAI), Al Ethics, Alignment Problem, Base AI, Collective Intelligence, Ethics/Values, Hallucination, Human Ethics, Intelligent Entities, Large Language Model, Machine Learning, Narrow AI, Personalized SuperIntelligence, Prohibited Attributes, Safety, Safety Feature, Training/Tuning/Customization, Weights, and Reputational Metrics.

4.0 Background for the Invention: This section provides an overview of the current state of online advertising, including its limitations and challenges. It also highlights the existing challenges of training AI systems, namely data and computational limits.

4.1 Overview of online advertising and monetization: This section describes the traditional online advertising model, which focuses on capturing and monetizing human attention by selling products and services.

4.2 Current Use of AI and Online Ad Targeting: This section discusses the use of AI for online ad targeting, including the use of data to personalize ads and the challenges of doing so.

4.3 Challenges to Monetization of Human Attention: This section discusses the under-monetization of human attention in the current online advertising model and the challenges of accurately reflecting the value of human attention.

4.4 Current Limitations on Al / AGI development: This section explores the limitations of AI development, including computational constraints and the availability of high-quality data.

4.5 Description of Previous Inventive Approach to AGI: This section introduces the inventor's previous approach to AGI development, which is the foundation for the current invention.

5.0 Opportunities and Benefits Enabled by Invention: This section describes the opportunities and benefits afforded by the invention, which include increasing the intelligence of AGI systems, monetizing human attention more efficiently and effectively, and addressing the Alignment Problem (ensuring that AI systems are safe and aligned with human values).

5.1 Opportunities to Increase Intelligence of AI / AGI systems: This section explores how the invention overcomes the limitations of current AI development by using human intelligence to bootstrap AGI, addressing the challenges of computational limits and data availability.

5.2 Opportunities to monetize human attention better than the current online ad paradigm: This section describes how the invention monetizes human attention more effectively than current online advertising models by focusing on the value of human expertise and its ability to solve problems rather than simply displaying ads.

5.3 Opportunities to Enhance Al safety: This section discusses the importance of Al safety and how the invention promotes Al safety by integrating human values and ethics into the design of the problem-solving network.

5.4 General Opportunities for and Threats to Online Ad Companies: This section explores the implications of the invention for online advertising companies, highlighting the opportunities and threats they face.

5.5 Synergies for Online Ad Companies with Focus on Al: This section outlines how the invention can be used by online ad companies, such as Google or META, to improve their Al systems and gain a competitive advantage in the field.

5.6 Benefits to Humanity from Wide Deployment of the Invention: This section discusses the importance of ensuring the safety and alignment of AI systems with human values and how the invention can contribute to a more secure future for humanity.

6.0 Systems and Methods: This section outlines the main components of the invention, including: the AGI Problem Solving Network, Custom AI Agents (AAAls), Methods for capturing human attention, Methods for accessing Human Agents, Systems and methods for implementing a Human Attention Spot Market, Systems and methods for capturing human attention via Online Ad Units, Compensation and payment mechanisms, Reputational Mechanisms, System and methods for supporting Problem Solving within Ad Units, System and methods for Problem Solving outside of AD Units, Feedback mechanisms to improve online ad targeting, Feedback mechanism to enhance the Attention Spot market, Continuous improvement mechanisms for the overall system, Dynamic Arbitrage mechanisms, Human Worker Interfaces and Client Interfaces for intelligent entities in the role of clients, Automated AI / AGI interfaces, Recursive use of problem solving to optimize ad targeting and system efficiency, Safety and ethics checks, Methods to ensure Regulatory compliance, Methods to ensure the Universality of the system and methods across platforms and cultures, Methods to dynamically support and increase and coordinate collaboration across ad units, Methods to support the Integration of Realtime and asynchronous data feeds.

6.1 Overview Main systems components: This section provides a general overview of the main system components.

6.2 AGI Problem Solving Network: This section describes the architecture and functionality of the AGI Problem Solving Network and how it is used to solve problems collaboratively.

6.3 Custom Al Agents (AAAls): This section describes the importance of customizing and personalizing AI agents and discusses the methods used to achieve this.

6.4 Human Attention vs. Human Agents: This section clarifies the distinction between human attention and human agents and discusses why it is important to focus on harnessing human attention, rather than human agents, to improve AI systems.

6.5 Human Agent / Experts database: This section describes the importance of building a database of human experts and discusses the methods used to achieve this.

6.6 Human Attention Spot Market: This section describes the architecture and functionality of the Human Attention Spot Market. Humans can sell their attention and expertise to AI systems in this market mechanism.

6.7 Online Ad Unit for Building a Database of Human Experts: This section describes an online ad unit's design, technical operation, and interaction process designed to capture and build

a database of human experts.

6.8 Online Ad Unit for Capturing a Direct Contribution of Knowledge from Human Experts: This section describes the design, technical operation, and interaction process of an online ad unit designed to capture direct contributions from human experts.

6.9 Exemplary Compensation Methods and Processes: This section describes the methods and processes used to compensate human experts for their contributions.

6.10 Reputational Mechanism: This section describes the importance of reputational metrics in the AGI system and the methods used to calculate and track these metrics.
6.11 Problem-Solving within Ad Unit: This section describes the process of problem-solving within the online ad unit, focusing on the role of human input in identifying operators and solving sub-problems.

6.12 Problem-Solving Outside of Ad Unit: This section explains how problem-solving can extend beyond the online ad unit to other systems and interfaces.

6.13 Feedback Mechanism to Online Ad Targeting: This section describes the feedback mechanism used to improve the accuracy and effectiveness of online ad targeting.

6.14 Feedback Mechanism / Process for Attention Spot Market: This section describes the feedback mechanism used to ensure fair pricing and a reliable market for human attention.

6.15 Continuous Improvement Mechanisms: This section discusses the methods used to continuously improve the effectiveness and efficiency of the overall online ad unit invention.

6.16 Dynamic Arbitrage Process: This section describes how online ad companies can leverage the invention to engage in dynamic arbitrage, buying and selling human attention.

6.17 Human Worker & Client Interfaces: This section describes the design and implementation of user interfaces for human workers and clients, including natural language interfaces and other methods for communicating with AI agents.

6.18 Automated Al / AGI interfaces: This section describes the design and implementation of user interfaces for AI agents and systems, including multi-modal interfaces.

6.19 Recursive Use of Problem-Solving to Optimize Ad Targeting and System Efficiency: This section discusses how the invention can be used recursively to solve cognitive problems and improve the overall system's efficiency.

6.20 Safety and Ethics Checks: This section discusses the importance of safety and ethics checks in the AGI system and the methods used to implement these checks.

6.21 Regulation Compliance: This section describes how the invention can comply with regulations and laws across different geographies and platforms.

6.22 Universality of System and Methods Across Platforms and Cultures: This section discusses the universality of the invention and how it can be adapted to different platforms and cultures.

6.23 Collaborative and Cross-Ad Unit Dynamic Coordination: This section describes the collaborative and dynamic coordination of problem-solving across different ad units and interfaces.

6.24 Integration of Realtime and Asynchronous Capabilities / Data Feeds: This section describes integrating real-time and asynchronous data feeds into the online ad unit.

7.0 Preferred Implementation and Variations: This section describes the preferred implementation of the invention for online ad companies, highlighting the specific steps involved. It also includes three implementation variations, focusing on different use cases and priorities.

7.1 Preferred Implementation for Online Ad Companies & Clients: This section describes the preferred implementation for online ad companies that act as brokers between clients and ad providers.

7.2 Variation #1 of Exemplary Preferred Implementation Where Company is also Client: This section describes a variation where the Company is also the Client, highlighting how online ad companies can use the invention to improve their own AI systems.

7.3 Variation #2 of Exemplary Preferred Implementation Where Focus is Al Safety / Ethics: This section describes a variation of the implementation where the focus is on AI safety and ethics, highlighting the importance of collecting human opinions on ethical issues and the implementation of safety checks.

7.4 Variation #3 of Exemplary Preferred Implementation to Include Non-Human Entities: This section describes a variation of the implementation that includes non-human intelligent entities, highlighting the importance of harnessing the attention and knowledge of AI systems, as well as other non-human intelligent entities, to improve AI systems.

8.0 Concluding Thoughts on Invention's Implications for Human Survival: This section discusses the importance of AI safety and the potential risks of AI extinction, highlighting the need for a global priority to ensure that AI systems are aligned with human values.

List of Diagrams

- **FIG X-4.** This flowchart details the steps from auction creation to completion in the Auction-Based Marketplace Implementation.
- **FIG X-5.** This diagram illustrates the steps involved in problem-solving within an online ad unit.
- **FIG X-6.** This diagram illustrates the feedback mechanism used to improve the accuracy and effectiveness of online ad targeting.
- **FIG X-7.** This diagram illustrates the feedback mechanism used to ensure fair pricing in the Human Attention Spot Market.
- **FIG. 1.** This diagram illustrates the main components of the AAAI system and the method of the present technology.
- **FIG. 2.** This diagram illustrates an exemplary overall process utilizable with the present technology.
- **FIG. 3.** This diagram illustrates an exemplary embodiment of the system and methods for creating a scalable, ethical, and safe AGI or PSI from the collective intelligence of AAAIs and humans utilizable with the present technology.
- **FIG. 4.** This diagram illustrates an exemplary embodiment of the scalable universal problem-solving system and methods for human-centered AGI, with relevance for PSIs, constructed by the principles of the present technology.
- **FIG. 5.** This diagram illustrates an exemplary embodiment of the scalable solution learning subsystem or process.
- **FIG. 6.** This diagram illustrates an exemplary embodiment of the scalable natural language to problem-solving language translator subsystem or process.
- **FIG. 7.** This diagram exemplifies the scalable reputational component subsystem or process for the human, Al, and/or PSI problem-solving agents.
- **FIG. 8.** This diagram illustrates an exemplary embodiment of the scalable safety and ethics checks subsystem or process, wherein Als might also be PSIs.
- **FIG. 9.** This diagram illustrates an exemplary electronic computing device that may be used to embody the present technology.
- **FIG. 10.** This diagram illustrates the steps of the universal problem-solving process.
- **FIG. 11.** This diagram illustrates the steps involved in the problem-solving network for coordinating problem-solving tasks across multiple intelligent entities.
- **FIG. 12.** This diagram illustrates the network for coordinating problem-solving tasks across multiple intelligent entities.
- **FIG. 13.** This diagram illustrates the network for coordinating problem-solving tasks across multiple intelligent entities.

Additional and revised diagrams are included in the PCT and country applications. Please get in touch with iQ Company for more information about those.

Importance of the Patent

The invention described in this Provisional Patent Application, if successfully developed and implemented, could significantly impact the development and advancement of AGI/SI and the future of humanity. The patent describes a novel and potentially revolutionary approach to harnessing human attention and knowledge more efficiently and effectively, directly connecting human experts through online ads to the problem-solving needs of AI systems. If adopted by

major technology companies, this approach could accelerate the development and deployment of safe and ethical AGI/SI systems, ensuring a more prosperous and secure future for humanity. The invention is a significant advancement in AI research and can change the course of AI development.

The patent is significant because it directly addresses two of the most important challenges facing AI development today: **data scarcity and the need for ethical AI systems**. The invention proposes a solution to the data scarcity challenge by creating a large-scale Human Agent/Experts Database, enabling the acquisition of high-quality data from human experts via online ads. It also addresses the need for ethical AI systems by integrating human values and ethics into the system's design, ensuring that AGI/SI systems learn to make ethical and safe decisions.

This approach could also provide a way to monetize human attention more efficiently and effectively than current online advertising models. The invention could lead to a significant increase in the value of human attention, as the system would pay humans for their expertise and knowledge based on its real-time value rather than just displaying ads that may not be relevant. This would also be a significant advancement in online advertising, as it could lead to more efficient and effective ad targeting and increased revenue for online ad companies.

The patent emphasizes the importance of AI safety and alignment with human values. The applicant acknowledges the risks of AI, including the potential for AI extinction, but argues that the invention provides a path to safe and ethical AGI/SI development. The patent also suggests that the most successful approach to developing safe and ethical AI systems is integrating human values and ethics into the system's design.

If adopted by major technology companies, this approach could lead to a future where AI systems are powerful, safe, and aligned with human values, ultimately contributing to a more prosperous and equitable future for all humankind.