Application No.: 17/456,874

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Harjeet KHANDUJA   Confirmation No.:   2351

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Title: SYSTEM AND METHOD FOR CANDIDATE ENGAGEMENT

AMENDMENT AND RESPONSE

VIA ELECTRONIC FILING SYSTEM
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Non-Final Office Action dated February 08, 2024, Applicant respectfully requests entry of the following amendments and consideration of the accompanying remarks being submitted.

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of the claims of the application.

1. **(Currently Amended)** A system for conducting life-cycle engagement of a candidate without human intervention on a device engagement architecture, said system comprising:

~~a centralized server communicating with at least one computing device associated with each of a plurality of potential candidates over a network; and~~

a processor that executes a set of executable instructions that are stored in a memory, upon which execution, the processor causes the system to:

generate, by the ~~centralized server~~ processor, real-time queries in view of multiple engagement criteria to obtain one or more responses from [[the]] at least one computing device associated with each of [[the]] a plurality of potential candidates over [[the]] a network, wherein said multiple engagement criteria comprise aptitude-based evaluation, technical evaluation, and behavioural evaluation;

select automatically, by the ~~centralized server~~ processor, from the plurality of potential candidates, at least one candidate based on any or a combination of pre-screening of said plurality of potential candidates based on a set of pre-defined requirement rules, and the generated responses with respect to said multiple engagement criteria, wherein candidature of said plurality of potential candidates is received in response to a released vacancy that is determined based on a set of pre-defined vacancy rules, wherein said set of pre-defined requirement rules comprises candidate profile screening rules;

initiate, by the processor utilizing an artificial intelligence (AI) engine [[from]] of the system, a video based conversation in real time with the at least one candidate through ~~a visual sensor present on~~ a computing device associated with said at least one candidate;

generate, by the AI engine, one or more responsive video frames in real-time to evaluate, the one or more responsive video frames being generated based on response provided by said least one candidate for a first set of queries in the video based conversation, wherein the first set of queries comprises an aptitude

required for the released vacancy, emotional intelligence, intellectual ability, personal history, general awareness, perspective or opinion, communication skills, and leadership abilities;

based on a combination of said pre-screening, said generated responses with respect to said multiple engagement criteria, and said AI engine based evaluation of the one or more responsive video frames, generate by [[a]] the processor, a score for said at least one candidate through a neural network associated with the AI engine, wherein said at least one candidate being finally engaged based on the generated score; and

train, by the processor, the neural network based on the generated score to automatically re-generate set of queries in real time for accurate generation of the score and accurate selection of [[the]] said at least one candidate.

2. **(Currently Amended)** The system as claimed in claim 1, wherein, upon a confirmed engagement of said at least one candidate, said system transmits a first set of data packets indicative of confirmation of engagement of said at least one candidate, in response to which, the computing device of said at least one candidate transmits a second set of data packets indicative of acknowledgement of said confirmation.

3. **(Currently Amended)** The system as claimed in claim 2, wherein said first set of data packets are indicative of an offered compensation and location to said engaged candidate.

4. **(Original)** The system as claimed in claim 2, wherein in case the second set of data packets are not transmitted by said computing device in a defined time-duration, the first set of data packets are automatically transmitted to a second candidate having next higher score to said engaged candidate.

5. **(Original)** The system as claimed in claim 2, wherein said second set of data packets comprises one or more document information associated with the engaged candidate, and wherein upon receipt of said second set of data packets, said system verifies said one or more document

information through said AI engine, upon successful verification of which, a third set of data packets are transmitted to said engaged candidate indicative of pre-boarding of said candidate.

6. **(Original)** The system as claimed in claim 1, wherein upon a confirmed engagement of said candidate, said processor performs blockchain based profile and integrity verification of said engaged candidate, upon successful verification of which, a fourth set of data packets are transmitted to said engaged candidate indicative of joining confirmation of said candidate.

7. **(Currently Amended**) The system as claimed in claim 6, wherein upon said joining of said engaged candidate, the computing device of said engaged candidate transmits, to ~~said~~ a blockchain, a fifth set of data packets that are indicative of physical presence and joining of said engaged candidate, in response to which, said processor configures the blockchain to generate a sixth set of data packets indicative of facial recognition verification of said engaged candidate, and upon successful facial recognition verification, communication of identification information assigned to said engaged candidate.

8. **(Cancelled)**

9. **(Cancelled)**

10. **(Currently Amended)** A method for conducting engagement of a candidate without human intervention, said method being executed by a processor of a system, and comprising:

      generating, by ~~a centralized server~~ the processor, real-time queries in view of multiple engagement criteria to obtain one or more responses from at least one computing device associated with each of a plurality of potential candidates over a network, ~~the centralized server communicates with the at least one computing device associated with each of the plurality of potential candidates over the network~~ wherein said multiple engagement criteria comprise aptitude-based evaluation, technical evaluation, and behavioural evaluation;

      selecting automatically, by the ~~centralized server~~ processor, from the plurality of potential candidates, at least one candidate based on any or a combination of pre-screening of said plurality of potential candidates based on a set of pre-defined requirement rules, and the

generated responses with respect to <u>said</u> multiple engagement criteria, wherein candidature of said plurality of potential candidates is received in response to a released vacancy that is determined based on a set of pre-defined vacancy rules<u>, and wherein said set of pre-defined requirement rules comprise candidate profile screening rules</u>;

initiating, by <u>the processor</u> utilizing an <u>artificial intelligence (AI)</u> engine [[from]<u>of</u> the system, a video based conversation with the at least one candidate through ~~a visual sensor present on~~ a computing device associated with said at least one candidate;

generating, by the AI engine, one or more responsive video frames in real-time to evaluate said at least one candidate, the one or more responsive video frames being generated based on response provided by said least one candidate for a first set of queries in the video based conversation<u>, wherein the first set of queries comprises an aptitude required for the released vacancy, emotional intelligence, intellectual ability, personal history, general awareness, perspective or opinion, communication skills, and leadership abilities</u>;

based on a combination of said pre-screening, said generated responses <u>with respect to said multiple engagement criteria</u>, and said AI engine based evaluation of the <u>one or more</u> responsive video frames, generating<u>, by the processor,</u> a score for said at least one candidate through a neural network <u>associated with the AI engine</u>, wherein said <u>at least one</u> candidate being finally engaged based on the generated score; and

training<u>, by the processor,</u> the neural network based on the generated score to automatically re-generate set of queries in real time for accurate generation of the score and accurate selection of the <u>at least one</u> candidate.

REMARKS

Reconsideration and allowance of the above-identified application are respectfully requested. Claims 1-7 and 10 are currently pending in this application. Claims 1, 2, 3, 7, and 10 are amended. Claims 8 and 9 are cancelled herein. No new matter is added. Support for the amendments can be found at least in the previously presented claims 8 and 9, and in paragraph [0043] of the as filed specification.

Claim Objections

Claims 1, 5, and 10 are objected because of informalities.

Applicant has amended independent claims 1 and 10 to overcome informalities. Therefore, Applicant respectfully requests the Examiner to withdraw the objections.

35 U.S.C. § 101 Rejections

Claims 1-10 are rejected under 35 U.S.C. § 101 as allegedly being directed to an abstract idea without significantly more.

Applicant respectfully disagrees with the Office Action. This rejection should be reversed for reasons presented below.

The USPTO issued the 2019 Revised Patent Subject Matter Eligibility Guidance (hereinafter the "2019 PEG") for determining subject matter eligibility, and these guidelines became effective January 7, 2019. See USPTO's January 7, 2019 Memorandum, 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019). Furthermore, the USPTO recently issued the October 2019 Patent Eligibility Guidance (hereinafter the "October 2019 Update") on October 18, 2019 to include a new set of examples and a discussion of various issues raised by public comments.

Under the 2019 PEG and the October 2019 Update, we first look to whether the claim recites:

> (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human interactions such as a fundamental economic practice, or mental processes); and
> (2) additional elements that integrate the judicial exception into a practical application (see MPEP § 2106.05(a}-I, (e}-(h)). See 2019 PEG at 52, 55-56.

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that are not "well-understood, routine, conventional" in the field (see MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception. See 2019 Guidance at 56.

Furthermore, the 2019 PEG "extracts and synthesizes key concepts identified by the courts as abstract ideas to explain that the abstract idea exception includes the following groupings of subject matter, when recited as such in a claim limitation(s) (that is, when recited on their own or per se)":

(a) Mathematical concepts-mathematical relationships, mathematical formulas or equations, mathematical calculations;

(b) Certain methods of organizing human activity fundamental economic principles or practices (including hedging, insurance, mitigating risk); commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations); managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions);

(c) Mental processes----concepts performed in the human mind (including an observation, evaluation, judgment, opinion). *Id* at 52.

The remarks below pertain to the required analysis as set forth in the 2019 PEG and as is summarized above. The remarks below further address remarks presented by the Examiner in the Office Action.

Step 2A: Prong One

Applicant respectfully submits that amended independent claims 1 and 10 are not directed to an abstract idea.

In particular, amended independent claim 1 is directed to a system for conducting life-cycle engagement of a candidate without human intervention on a device engagement architecture to provide a solution to a problem in traditional recruitment processes. For example, traditional processes rely on manual intervention, leading to inefficiencies, inconsistencies in candidate assessment, potential biases, and increased costs. Manual screening of applications, conducting interviews, and verifying credentials consume significant time and resources, delaying the hiring

process and affecting organizational productivity. Moreover, manual verification of documents poses risks of fraudulent submissions and compromises the integrity of the hiring process (*See* Applicant's as-filed specification, paragraphs [0003]- [0006]).

Further, the system claimed in amended independent claim 1 includes a processor to generate real-time queries over multiple potential candidates' computing devices based on various engagement criteria, such as aptitude, technical skills, and behavior. The system automatically selects candidates using pre-defined requirements and generated responses by candidates. Further, the system includes a processor utilizing an artificial intelligence (AI) engine to initiate video-based conversations in real time with selected candidates, and evaluating their responses in real-time by generating one or more responsive video frames based on response provided by said least one candidate for a first set of queries in the video based conversation. The processor generates scores for candidates based on a combination of pre-screening, generated responses with respect to multiple engagement criteria, and AI evaluations of the responsive video frames, with the possibility of candidate engagement based on this score. Further, the neural network is trained using the generated score to improve query generation and candidate selection accuracy.

Applicant respectfully submits that the features described in amended independent claim 1 are distinctly separate from abstract ideas related to commercial interactions, mental processes, and managing personal behavior or relationships.

First, the features of amended independent claim involve specific technical steps and processes beyond mere organization of human activities. Utilizing technology like AI engine and neural networks, the system facilitates recruitment and candidate evaluation. These elements represent a technological framework geared towards optimizing candidate selection, indicating a departure from abstract notions of organizing human activities.

Second, the process transcends mental processes by incorporating systematic evaluation criteria and technological tools. While the claim does involve assessing candidates' responses and behaviors, this evaluation is methodically conducted through AI-driven analysis and predefined criteria. The scoring mechanism relies on a systematic analysis rather than subjective judgment or opinion, further distinguishing it from mental processes.

Further, the described features are not centered on managing personal behavior or relationships. Rather, they focus on the recruitment and selection process within a technological framework. The objective remains assessing candidates' qualifications and suitability for a

position via the interaction between individuals and AI engine during video-based interviews and generating real-time queries. The technology-driven nature of the process underscores its distinction from activities related to interpersonal interactions or relationship management.

Amended independent claim 10 recites some features that are analogous to the features of amended independent claim 1. Hence, the remarks presented above for amended independent claim 1 apply equally to amended independent claim 10.

Therefore, Applicant respectfully submits that amended independent claims 1 and 10 are not directed to an abstract idea under Prong One of Step 2A.

Claims 2-7 are dependent on, and incorporate the features of amended independent claim 1, and therefore, are allowable by virtue of their dependency over amended independent claim 1.

Step 2A: Prong Two

Notwithstanding the above remarks, assuming *arguendo*, that amended independent claims 1 and 10 are directed to an abstract idea/judicial exception as the Office Action contends, Applicant respectfully submits that amended independent claims 1 and 10 recite additional elements that integrate the judicial exception into a practical application.

For example, the claimed invention integrates conducting candidate engagement into a practical application through specific technological components such as computing devices, a processor, memory, an AI engine, and neural networks. Applicant respectfully submits that these components are not merely generic computer elements but are specialized tools tailored to facilitate the unique functionality of the system. The combination and interaction of these components enable the automation of candidate engagement processes, which transforms the abstract idea into a concrete, practical solution.

Particularly, the invention improves the technical field of candidate selection and engagement by leveraging advanced technologies such as AI and real-time communication by initiating a video based conversation in real time with at least one candidate without human intervention. For example, the claimed invention provides an automated system and method capable of managing the entire candidate engagement lifecycle. The claimed system with the use of an AI engine and neural network enhances the accuracy and efficiency of candidate evaluation, and enables to eliminate or minimize human intervention, while ensuring efficiency, speed, cost-effectiveness, and reliability throughout the recruitment process. By addressing these concerns,

the invention aims to streamline recruitment practices, enhance candidate assessment accuracy, reduce costs, and mitigate risks associated with manual verification procedures.

Further, Applicant submits that the claims provide specific steps and elements for implementing the candidate engagement process, including generating real-time queries in real time, initiating video-based conversations in real time, and evaluating candidate responses in real time. These specific implementations go beyond abstract concepts and describe practical steps for achieving a tangible outcome, namely, the selection and engagement of candidates based on predetermined criteria.

Furthermore, by posing tailored queries to candidates in real-time video-based conversations, the AI engine replicates the discernment and adaptability typically associated with human evaluators, ensuring effective evaluation and enhancing consistency—a challenge in human-based evaluation where different evaluators introduce variability. The AI engine's standardized approach across all candidate interactions contributes to the reliability and fairness of recruitment. Its queries cover a wide array of factors crucial for evaluating candidates, including aptitude, emotional intelligence, intellectual capacity, personal history, general awareness, perspective, communication skills, and leadership abilities. These queries delve into dimensions challenging for human evaluators to consistently assess. Tailored to each vacancy's unique requirements, they reflect a nuanced understanding of necessary skills, surpassing the limitations of human-based evaluation and ensuring a targeted and precise assessment process.

Thus, Applicant respectfully submits that amended independent claim 1 integrates the purported judicial exception into a practical application under Prong Two of Step 2A.

Amended independent claim 10 recites some features that are analogous to the features of amended independent claim 1. Hence, the remarks presented above for amended independent claim 1 apply equally to amended independent claim 10.

Therefore, Applicant respectfully submits that amended independent claims 1 and 10 are not directed to an abstract idea under Prong Two of Step 2A.

Claims 2-7 are dependent on, and incorporate the features of amended independent claim 1, and therefore, are allowable by virtue of their dependency over amended independent claim 1.

Step 2B

Notwithstanding the above remarks under Step 2A, assuming *arguendo*, that amended independent claims 1 and 10 are directed to an abstract idea/judicial exception as the Office Action contends, Applicant respectfully submits that amended independent claims 1 and 10 amount to "significantly more" than an abstract idea.

According to the MPEP, "[e]valuating additional elements to determine whether they amount to an inventive concept requires **considering them both individually and in combination to ensure that they amount to significantly more than the judicial exception itself** … Consideration of the elements in combination is particularly important, because even if an additional element does not amount to significantly more on its own, it can still amount to significantly more when considered in combination with the other elements of the claim" (emphasis added). *See MPEP 2106.05(I).*

Reconsideration and withdrawal of the rejection of independent claims 1 and 10 under 35 U.S.C. § 101 are requested in view of the decision of the Court of Appeals for the Federal Circuit regarding subject matter eligibility as acknowledged by the USPTO in its Memorandum issued on November 2, 2016, addressing "Recent Subject Matter Eligibility Decisions (BASCOM Global Internet Services v. AT&T Mobility LLC)." The USPTO, in the Memorandum, instructs "[t]he BASCOM court agreed that the additional elements were generic computer, network, and Internet components that did not amount to significantly more when considered individually, but explained that the district court erred by failing to recognize that **when combined, an inventive concept may be found in the non-conventional and non-generic arrangement of the additional elements** … **(note that the term 'inventive concept' is often used by the courts to describe additional element(s) that amount to significantly more than a judicial exception)**" (emphasis in original). The USPTO, in the Memorandum, further describes "[i]n Step 2B of the USPTO's SME guidance, **examiners should consider the additional elements in combination, as well as individually, when determining whether a claim as a whole amount to significantly more**, as this may be found in the non-conventional and non-generic arrangement of known, conventional elements."

Applicant respectfully submits that amended independent claim 1 recites an "inventive concept." For example, **incorporation of AI-driven video-based interactions represents a significant progression in the domain of candidate engagement. Through the utilization of**

artificial intelligence, the system facilitates tailored interactions with candidates. This interactive platform not only enhances the candidate experience but also furnishes the system with valuable insights for evaluation purposes. Furthermore, the **system's capacity to produce responsive video frames instantaneously enables to efficiently carry out the engagement process, streamlining feedback mechanisms and decision-making procedures**. These features showcase a tangible implementation of advanced technologies beyond abstract notions, demonstrating the system's practical utility and effectiveness in candidate evaluation.

Additionally, with the incorporation of **a neural network-based scoring mechanism, the system can dissect intricate datasets and derive impartial scores reflective of a candidate's suitability for a given role**. This data-centric approach not only heightens the precision and dependability of candidate selection but also underscores the practical application of computational techniques within recruitment paradigms. Moreover, the system further **trains the neural network to autonomously generate queries based on past interactions and outcomes**. This iterative learning process ensures the system's evolution over time, refining its functionalities to align more closely with organizational imperatives and engagement standards. Collectively, these features constitute a comprehensive and technologically sophisticated system for candidate engagement and selection, surpassing abstract concepts to offer practical solutions to the multifaceted challenges inherent in contemporary recruitment.

Thus, the combination of the elements in the claims goes beyond mere instructions to apply an abstract idea using generic computer components. The arrangement and interaction of the components demonstrate an inventive concept tailored to address the specific challenges and objectives of candidate engagement in a technologically advanced manner.

In view of the foregoing remarks, Applicant respectfully submits that amended independent claim 1, when taken as a whole, qualifies as significantly more than an abstract idea.

Amended independent claim 10 recites some features that are analogous to the features recited by amended independent claim 1. Hence, the remarks presented above for amended independent claim 1 apply equally to amended independent claim 10.

Therefore, Applicant respectfully submits that amended independent claims 1 and 10 amount to "significantly more" than an abstract idea under Step 2B.

Claims 2-7 are dependent on, and incorporate the features of amended independent claim 1, and therefore, for at least the reasons provided in the discussion above, dependent claims 2-7 also amount to "significantly more" than an abstract idea under Step 2B.

Accordingly, Applicant respectfully requests that the rejection of claims 1-7 and 10 under 35 U.S.C. § 101 be withdrawn.

The rejection of claims 8 and 9 is moot in view of their cancellation.

35 U.S.C. § 103 Rejections

Claims 15 and 8-10 are rejected under 35 U.S.C. 103 as being unpatentable over U.S. Patent Application Publication No. 2018/0336528 A1 to Carpenter et al. (hereafter "Carpenter") in view of U.S. Patent Application Publication No. 2020/0387850 A1 to Kramer et al (hereafter "Kramer").

Applicant respectfully traverses these rejections. Applicant respectfully submits that Carpenter and Kramer, either alone or in combination, fail to teach or suggest all of the features recited in amended independent claims 1 and 10.

For example, amended independent claim 1 recites, *inter alia*, the following features, which are not described in Carpenter, and Kramer:

> "***initiate, by the processor utilizing an artificial intelligence (AI) engine of the system, a video based conversation in real time with the at least one candidate*** *through a computing device associated with said at least one candidate;*
> ***generate, by the AI engine, one or more responsive video frames in real-time to evaluate, the one or more responsive video frames being generated based on response provided by said least one candidate for a first set of queries in the video based conversation***, *wherein the first set of queries comprises an aptitude required for the released vacancy, emotional intelligence, intellectual ability, personal history, general awareness, perspective/opinion, communication skills, and leadership abilities;*
> *based **on a combination of said pre-screening, said generated responses with respect to said multiple engagement criteria, and said AI engine based evaluation of the one or more responsive video frames**, **generate, by the processor, a score for said at least one candidate through a neural network associated with the AI engine, wherein said at least one candidate being finally engaged based on the generated score**; and*
> ***train**, by the processor, the neural network based on the generated score **to automatically re-generate set of queries in real time for accurate generation of the score and accurate selection of said at least one candidate***," (emphasis added).

Amended independent claim 10 recites similar features.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. In re Fine, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); In Re Wilson, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970).

With respect to previously presented independent claim 1, the Office Action, on pages 19-21, asserts Carpenter does not specifically disclose, but refers to Kramer for allegedly teaching-

initiate, by utilizing an artificial intelligence (AI) engine from the system, a video based conversation with the at least one candidate through a visual sensor present on a computing device associated with said at least one candidate; generate, by the AI engine, one or more responsive video frames in real-time to evaluate, the one or more responsive video frames being generated based on response provided by said least one candidate for a first set of queries in the video based conversation, and refers to at least paragraphs 17, 33, and 36 of Kramer for supporting the same. Applicant respectfully requests reconsideration.

Kramer is generally related to a processing device to receive a request to create a tiered evaluation comprising a plurality of tiers to group candidates by competency. The processing device of Kramer is configured to "generate a first tier of the plurality of tiers with a first criteria comprising a first range of assessment scores; send a first candidate assessment; receive first assessment data of the first candidate profile captured during the first candidate assessment; generate a first assessment score associated with the first candidate profile from the first assessment data; determine that the first candidate profile satisfies the first criteria by at least determining that the first range of assessment scores comprises the first assessment score; responsive to determining that the first candidate profile satisfies the first criteria, place the first candidate profile in the first tier; and send tiered assessment data comprising the first tier with the first candidate profile" (refer e.g., Abstract of Kramer).

Further, Kramer recites:

"The automated assessment, categorization, and/or generation of scoring tiers may be carried out on a hiring platform (such as HireVue's Platform of South Jordan, Utah) that includes one or more web server (or other computing device), web-based application programming interfaces (APIs), hardware integration with microphones, video cameras, scheduling software, and other such services provided by software and integrated across the hiring platform. Such integration may further include and is not limited to integration with mobile applications, telephone/video services, and other software and hardware-based **systems that collect data, including video interviews, informational assessments, and the like**. The hiring platform may further include the processing power and means to organize and analyze collected data with artificial intelligence such as machine learning models and algorithms, e.g., labeled data algorithm, classification algorithm, tree-structured classifier, regression algorithm, association algorithm, ensemble algorithm, supervised learning, support vector machine (SVM) algorithm, neural networks, deep neural networks, decision trees, Naive Bayes, nearest neighbor, unsupervised learning, semi-supervised learning, reinforced learning, ensemble, and the like" (refer e.g., paragraph [0017] of Kramer).

"The candidate assessment may comprise artificial intelligence power video-based and game-based assessment. In one embodiment **artificial intelligence can be used to transform OnDemand video interview into a scored assessment that can reduce bias and augment talent decisions at scale**" (refer e.g., paragraph [0033] of Kramer).

"In some embodiments, **video based assessment can statistically link the video data from recorded interviews to job performance data and/or competencies**. In some embodiments, the platform may create an algorithm to analyze the interviews relevant for each job role. The algorithm may undergo full validation testing, as well as adverse impact mitigation. For example, the platform can remove from consideration any data that contributes to adverse impact without significantly impacting the assessment's accuracy. A video based assessment combined with artificial intelligence may provide insight into attributes like social intelligence (interpersonal skills), communication skills, personality traits, and overall job aptitude" (refer e.g., paragraph [0036] of Kramer).

Kramer, in the cited portions and elsewhere, describes automated assessment, categorization, and generation of scoring tiers within a hiring platform. Kramer describes the integration of various technologies and services, including web servers, APIs, hardware integration with microphones and video cameras, scheduling software, and mobile applications, which **facilitates the collection of data, including video interviews and informational assessments, across the hiring platform**. Additionally, Kramer describes utilization of artificial intelligence (AI) for organizing and analyzing collected data, employing various machine learning models and algorithms such as labeled data algorithms, classification algorithms, and neural networks. Therefore, Kramer primarily focuses on **collecting data from recorded interviews**.

In other words, Kramer, at best, describes the **use of artificial intelligence to transform pre-recorded video interviews into scored assessments and analyze data for job performance and competencies**. However, Kramer fails to teach or suggest initiating, utilizing an artificial intelligence (AI) engine, <u>**a video based conversation in real time with candidates**</u>.

In amended independent claim 1, the system, by initiating real-time video-based conversations, is able to assess candidates by directly engaging with candidates and evaluating their aptitude, emotional intelligence, communication skills, and other attributes as the interaction unfolds. Unlike the static data-centric approach of D1, which primarily relies on recorded interviews, this real-time assessment provides immediate insights into candidate suitability for specific job vacancies. By leveraging live interactions, the scoring process outlined in amended independent claim 1 combines pre-screening information, candidate responses, and AI-based evaluation of video frames. Therefore, the assessment approach as described in amended independent claim 1 ensures a comprehensive evaluation of candidates, taking into account multiple engagement criteria in real-time.

Further, the integration of AI-driven evaluation with live interactions offers a dynamic and interactive means of assessing candidates, transcending the limitations of traditional data-centric analysis, as described in Kramer. By dynamically adapting to candidate responses and behavior during the conversation, the system outlined in amended independent claim 1 provides deeper insights into candidate suitability for specific roles.

Therefore, Kramer fails to teach or suggest "*initiate, by the processor utilizing an artificial intelligence (AI) engine of the system, a video based conversation in real time with the at least one candidate through a computing device associated with said at least one candidate; generate, by the AI engine, one or more responsive video frames in real-time to evaluate, the one or more responsive video frames being generated based on response provided by said least one candidate for a first set of queries in the video based conversation,*" as recited in amended independent claim 1.

Further, as Kramer fails to teach or suggest "*initiate, by the processor utilizing an artificial intelligence (AI) engine of the system, a video based conversation in real time with the at least one candidate through a computing device associated with said at least one candidate,*" consequently, Kramer fails teach or suggest:

"*generate, by the AI engine, one or more responsive video frames in real-time to evaluate, the one or more responsive video frames being generated based on response provided by said least one candidate for a first set of queries in the video based conversation, wherein the first set of queries comprises an aptitude required for the released vacancy, emotional intelligence, intellectual ability, personal history, general awareness, perspective/opinion, communication skills, and leadership abilities;*

based on a combination of said pre-screening, said generated responses with respect to said multiple engagement criteria, and said AI engine based evaluation of the one or more responsive video frames, generate, by the processor, a score for said at least one candidate through a neural network associated with the AI engine, wherein said at least one candidate is finally engaged based on the generated score; and

train, by the processor, the neural network based on the generated score to automatically re-generate set of queries in real time for accurate generation of the score and accurate selection of said at least one candidate," as recited in amended independent claim 1.

Carpenter fails to cure the deficiencies of Kramer. Accordingly, Carpenter and Kramer, either alone or in combination, fail to teach or suggest the above-mentioned features of amended independent claim 1. Amended independent claims 10 recites some or all subject matter similar to amended independent claim 1, and therefore, Applicant respectfully submits that all the remarks made for amended independent claim 1 above, apply equally to amended independent claim 10.

For at least these reasons, Applicant respectfully requests that the rejection of independent claims 1 and 10 under 35 U.S.C. § 103 be withdrawn.

In addition, dependent claims 2-5 are also allowable at least by virtue of their dependency on amended independent claim 1, which has been shown to be allowable above, and as well as for their additional claimed features.

Accordingly, Applicant respectfully requests that the rejection of dependent claims 2-5 under 35 U.S.C. § 103 be withdrawn as well. The rejection of claims 8 and 9 is moot in view of their cancellation.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carpenter in view of Kramer, and in view of U.S. Patent Application Publication No. 10/693872 B1 to Larson et al. (hereafter "Larson").

Larson is not alleged to cure the deficiencies of Carpenter and Kramer in the rejection of independent claim 1. Further, dependent claims 6 and 7 are allowable at least by virtue of their dependency on amended independent claim 1, which has been shown to be allowable above, and as well as for their additional claimed features.

For at least these reasons, Applicant respectfully requests that the rejection of dependent claims 6 and 7 under 35 U.S.C. § 103 be withdrawn.

Conclusion

In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited. Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below.

Respectfully submitted,

Dated: April XX, 2024   By

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