UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
95/001,914	02/29/2012	7,932,923		1269

6449 7590 05/23/2012	EXAMINER
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SUITE 800	ART UNIT	PAPER NUMBER
WASHINGTON, DC 20005	3992	

MAIL DATE	DELIVERY MODE
05/23/2012	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

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THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS

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Transmittal of Communication to Third Party Requester
Inter Partes Reexamination

REEXAMINATION CONTROL NO. : 95001914

PATENT NO. : 7932923

TECHNOLOGY CENTER : 3999

ART UNIT : 3992

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified Reexamination proceeding. 37 CFR 1.903.

Prior to the filing of a Notice of Appeal, each time the patent owner responds to this communication, the third party requester of the inter partes reexamination may once file written comments within a period of 30 days from the date of service of the patent owner's response. This 30-day time period is statutory (35 U.S.C. 314(b)(2)), and, as such, it cannot be extended. See also 37 CFR 1.947.

If an ex parte reexamination has been merged with the inter partes reexamination, no responsive submission by any ex parte third party requester is permitted.

All correspondence relating to this inter partes reexamination proceeding should be directed to the Central Reexamination Unit at the mail, FAX, or hand-carry addresses given at the end of the communication enclosed with this transmittal.

PTOL-2070(Rev.07-04)

ORDER GRANTING/DENYING REQUEST FOR INTER PARTES REEXAMINATION	Control No. 95/001,914	Patent Under Reexamination 7,932,923
	Examiner DEANDRA HUGHES	Art Unit 3992

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address. --

The request for *inter partes* reexamination has been considered. Identification of the claims, the references relied on, and the rationale supporting the determination are attached.

Attachment(s): ☐ PTO-892 ☒ PTO/SB/08 ☐ Other: _____

1. ☒ The request for *inter partes* reexamination is GRANTED.

 ☒ An Office action is attached with this order.

 ☐ An Office action will follow in due course.

2. ☐ The request for *inter partes* reexamination is DENIED.

This decision is not appealable. 35 U.S.C. 312(c). Requester may seek review of a denial by petition to the Director of the USPTO within ONE MONTH from the mailing date hereof. 37 CFR 1.927. EXTENSIONS OF TIME ONLY UNDER 37 CFR 1.183. In due course, a refund under 37 CFR 1.26(c) will be made to requester.

All correspondence relating to this *inter partes* reexamination proceeding should be directed to the **Central Reexamination Unit** at the mail, FAX, or hand-carry addresses given at the end of this Order.

DECISION

1.   The request for *inter partes* reexamination filed Feb. 29, 2012 asserts that

claims 1-41 of USP 7,732,923 ("**'923 patent**") are unpatentable.

2.   Upon review, the request establishes a reasonable likelihood that Requester will

prevail with respect to **claims 1-41** of the **'923 patent**.

References Cited in Request

3.   A total of eight references, applied alone or in certain combinations, have been

asserted in the request as providing teachings relevant to the claims of the '923 patent.

The references are as follows:

(1)   USP 5,969,755 to Courtney issued Oct. 19, 1999. ("**Courtney-US**")

(2)   EP 0967584A2 to Courtney published Dec. 29, 1999. ("**Courtney-EP**")

(3)   Courtney, Jonathan. Automatic Video Indexing via Object Motion Analysis. Pattern Recognition. Vol. 30. No. 4. pp. 607-625. 1997. ("**Courtney-NPL**")

(4)   USP 6,628,835 to Brill et al. issued Sep. 30, 2003. ("**Brill**")

(5)   USP 6,721,454 to Qian et al. issued Apr. 13, 2004. ("**Qian**")

(6)   USP 7,658,635 to Paek et al. issued Jan. 26, 2010. ("**Paek**")

(7)   Olson et al. Moving Object Detection and Event Recognition Algorithms for Smart Cameras. Proceedings of the 1997 Image Understanding Workshop. pgs. 159-175. May 1997. ("**Olson**")

(8)   Shotton et al. Object Tracking and Event Recognition in Biological Microscopy Videos. 5th Int'l Conf. On Pattern Recognition (ICPR2000). Technical Report UMA-DAC-00/26. Sept. 3-8, 2000. ("**Shotton**")

Identification of Every Claim for Which Reexamination is Requested

4.   The seven references cited above are discussed in the request and asserted to render unpatentable **claims 1-41** of the '923 patent.

Pages 27-89 of the request include explanations and claim charts that seek to establish a reasonable likelihood that Requester will prevail ("RLP") with respect to at least one of the patent claims.

The explanations in the request are addressed under subheadings designating each as a numbered "Issue" as follows:

Issue (A):	Whether there is an RLP as to the proposed rejection of **claims 1-7, 9-13, and 15-28** as anticipated by **Courtney-US**.	
Issue (B):	Whether there is an RLP as to the proposed rejection of **claim 14** as obvious over **Courtney-US**.	
Issue (C):	Whether there is an RLP as to the proposed rejection of **claims 8 and 29-41** as obvious over **Courtney-US** and **Olson**.	
Issue (D):	Whether there is an RLP as to the proposed rejection of **claims 1-7, 9-13, and 15-28** are anticipated by **Shotton**.	
Issue (E):	Whether there is an RLP as to the proposed rejection of **claim 14** as obvious over **Shotton**.	
Issue (F):	Whether there is an RLP as to the proposed rejection of **claims 8 and 29-41** as obvious over **Shotton** and **Brill**.	
Issue (G):	Whether there is an RLP as to the proposed rejection of **claims 1-41** as obvious over **Courtney-EP** and **Olson**.	
Issue (H):	Whether there is an RLP as to the proposed rejection of **claims 1-41** as obvious over **Courtney-NPL** and **Olson**.	
Issue (I):	Whether there is an RLP as to the proposed rejection of **claims 1-41** as obvious over **Courtney-EP** and **Brill**.	

Issue (J):   Whether there is an RLP as to the proposed rejection of **claims 1-41** as obvious over the **Courtney-NPL** and **Brill**.

Issue (K):   Whether there is an RLP as to the proposed rejection of **claims 1-41** as obvious over **Winter**, **Lipton**, and **Brill**.

Issue (L):   Whether there is an RLP as to the proposed rejection of **claims 1-7 and 9-28** as obvious over **Paek**, **Qian**, and **Courtney-US**.

Issue (M):   Whether there is an RLP as to the proposed rejection of **claims 8 and 29-41** as obvious over **Paek, Qian**, **Courtney-US**, and **Olson**.

Issue (N):   Whether there is an RLP as to the proposed rejection of **claims 1-7 and 9-28** as obvious over **Paek**, **Qian**, and **Shotton**.

Issue (O):   Whether there is an RLP as to the proposed rejection of **claims 8 and 29-41** as obvious over **Paek**, **Qian**, **Shotton**, and **Brill**.

Issue (P):   Whether there is an RLP as to the proposed rejection of **claims 1-41** as obvious over **Paek, Qian, Courtney-EP**, and **Olson**.

Issue (Q):   Whether there is an RLP as to the proposed rejection of **claims 1-41** as obvious over **Paek, Qian, Courtney-EP**, and **Brill**.

Issue (R):   Whether there is an RLP as to the proposed rejection of **claims 1-41** as obvious over **Paek, Qian, Courtney-NPL**, and **Brill**.

Issue (S):   Whether there is an RLP as to the proposed rejection of **claims 1-41** as obvious over **Paek, Qian, Courtney-NPL**, and **Olson**.

Summary

5.   The following issues have been determined to have a reasonable likelihood of

prevailing for the identified claims, and therefore, will be addressed in the non-final

action.

    Issue (A):   Whether there is an RLP as to the proposed rejection of **claims 1-7, 9-13, and 15-28** as anticipated by **Courtney-US**.

    Issue (B):   Whether there is an RLP as to the proposed rejection of **claim 14** as obvious over **Courtney-US**.

    Issue (D):   Whether there is an RLP as to the proposed rejection of **claims 1-7, 9-13, and 15-28** are anticipated by **Shotton**.

    Issue (E):   Whether there is an RLP as to the proposed rejection of **claim 14** as obvious over **Shotton**.

    Issue (F):   Whether there is an RLP as to the proposed rejection of **claims 8 and 29-41** as obvious over **Shotton** and **Brill**.

    Issue (I):   Whether there is an RLP as to the proposed rejection of **claims 1-41** as obvious over **Courtney-EP** and **Brill**.

6.   Issues (C), (G)-(H), and (J)-(S) have been determined NOT to have a reasonable

likelihood of prevailing for the identified claims, and therefore, will not be addressed in

the non-final action.

Directory

This order is organized according to the independent claims and their respective dependent claims as follows.

<div align="center">CLAIMS 1-7</div>

For the reasons set forth below, the following issues have been determined to have a reasonable likelihood of prevailing for the identified claims, and will be addressed in the non-final action.

Issue (A):   **Claims 1-7** anticipated by **Courtney-US**.

Issue (D):   **Claims 1-7** anticipated by **Shotton**.

Issue (I):   **Claims 1-7** obvious over **Courtney-EP** and **Brill**.

For the reasons set forth below, the following issues have been determined to NOT have a reasonable likelihood of prevailing for the identified claims, and will NOT be addressed in the non-final action.

Issue (G):   **Claims 1-7** obvious over **Courtney-EP** and **Olson**.

Issue (H):   **Claims 1-7** obvious over **Courtney-NPL** and **Olson**.

Issue (J):   **Claims 1-7** obvious over **Courtney-NPL** and **Brill**.

Issue (K):   **Claims 1-7** obvious over **Winter, Lipton**, and **Brill**.

Issue (L):   **Claims 1-7** obvious over **Paek, Qian,** and **Courtney-US**.

Issue (N):   **Claims 1-7** obvious over **Paek, Qian,** and **Shotton**.

Issue (P):   **Claims 1-7** obvious over **Paek, Qian, Courtney-EP,** and **Olson**.

Issue (Q):   **Claims 1-7** obvious over **Paek, Qian, Courtney-EP,** and **Brill**.

Issue (R):   **Claims 1-7** obvious over **Paek, Qian, Courtney-NPL,** and **Brill**.

Issue (S):   **Claims 1-7** obvious over **Paek, Qian, Courtney-NPL,** and **Olson**.

Issue (A)

Requester proposed that **claims 1-7** are anticipated by **Courtney-US**. The examiner agrees that this anticipation rejection over **Courtney-US** has a reasonable

likelihood of prevailing because the general application of **Courtney-US** to <u>**claims 1-7**</u>

in the claim charts appears reasonable. (*request pgs. 28-32 and claim charts pgs. 2-15*)

Therefore, requester has shown a reasonable likelihood of prevailing with respect to this

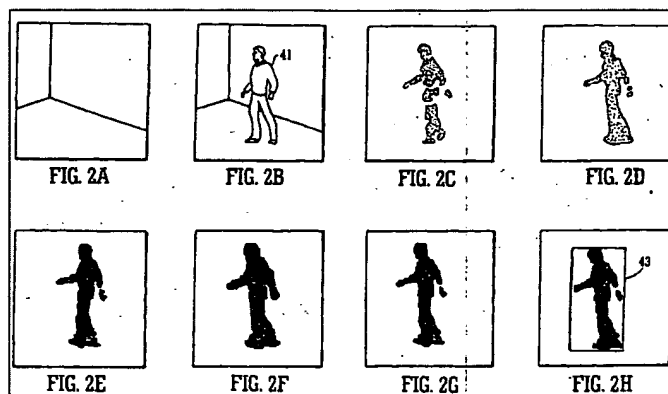proposed anticipation rejection of <u>**claims 1-7**</u>.

Issue (D)

Requester proposed that <u>**claims 1-7**</u> are anticipated by **Shotton**. The examiner

agrees that this anticipation rejection over **Shotton** has a reasonable likelihood of

prevailing because the general application of **Shotton** to <u>**claims 1-7**</u> in the request (*pgs.*

38-42) and claim charts (*claim charts pgs. 104-116*) appears reasonable. Therefore,

requester has shown a reasonable likelihood of prevailing with respect to this proposed

anticipation rejection of <u>**claims 1-7**</u>.
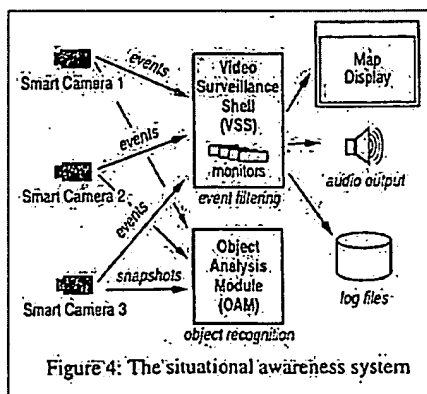
Issue (G)

Requester proposed that <u>**claims 1-7**</u> are obvious over the combination of

Courtney-EP and **Olson**. The request and claim charts allege that **Courtney-EP**

discloses limitations of <u>**claims 1-7**</u> and **Olson** teaches limitations of <u>**claims 1-7**</u>. (*request*

pgs. 51-57 and claim charts pgs. 242-288)

As to the limitation of "*detecting an object in a video from a single camera*",

requester cites **Courtney-EP** as disclosing this limitation and **Olson** as teaching this

limitation. (*claim charts pgs. 242-246*) Since requester is citing both **Courtney-EP** and

Olson for this single limitation, the examiner considers the combination of **Courtney-EP**

and **Olson**, as presented in the request and claim charts, is required to meet this

limitation.

Requester cites **Courtney-EP** as disclosing this limitation in ¶¶*[0002], [0017],*

[0028] to [0034], and figure 2. For the reader's convenience, *figure 2* of **Courtney-EP** is

reproduced below.

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4.*

For the reader's convenience, *figure 4* of **Olson** is reproduced below.

The examiner does **not** agree that this obviousness rejection over **Courtney-EP**

and **Olson** has a reasonable likelihood of prevailing because the general application of

the combination of **Courtney-EP** and **Olson** to **claims 1-7**, as presented in the request

and claim charts, teaches away from the limitation of *"detecting an object in a video*

from a single camera" because **Courtney-EP** is being modified by the multiple smart

cameras of **Olson**'s *figure 4* thereby resulting in a system/method that detects an object

in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera. For at least this

reason, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to

this proposed obviousness rejection of **claims 1-7** because the teaching of **Olson**, as

presented in the request and claim charts, teaches away from the claimed invention.

Issue (H)

Requester proposed that **claims 1-7** are obvious over the combination of

Courtney-NPL and **Olson**. The request and claim charts allege that **Courtney-NPL**

discloses limitations of **claims 1-7** and **Olson** teaches limitations of **claims 1-7**. (_request_

pgs. 63-64 and claim charts pgs. 1108-1142)

As to the limitation of "_detecting an object in a video from a single camera_",

requester cites **Courtney-NPL** as disclosing this limitation and **Olson** as teaching this

limitation. (_claim charts pgs. 1108-1110_) Since requester is citing **Courtney-NPL** and

Olson for this single limitation, the examiner considers the combination of **Courtney-**

NPL and **Olson**, as presented in the request and claim charts, is required to meet this

limitation.

Requester cites **Courtney-NPL** as disclosing this limitation in _pg. 616, col.2, figure_

13, pg. 608, col.2, figures 1-2, pg. 609, cols. 1 and 2, and figure 13. For the reader's

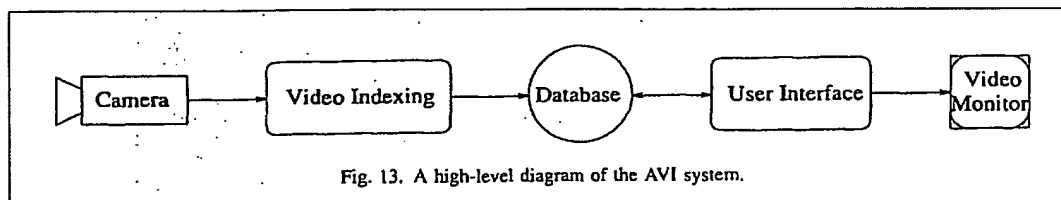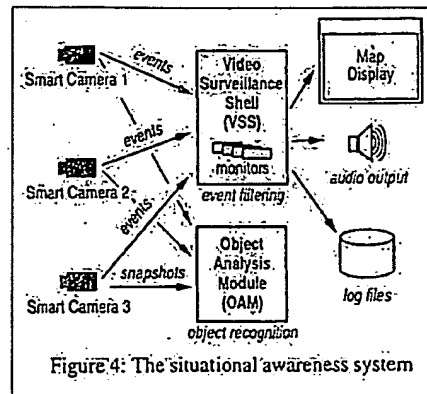convenience, _figure 13_ of **Courtney-NPL** is reproduced below.

Fig. 13. A high-level diagram of the AVI system.

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

For the reader's convenience, *figure 4* of **Olson** is reproduced below.


Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection over **Courtney-NPL** and **Olson** has a reasonable likelihood of prevailing because the general application of the combination of **Courtney-NPL** and **Olson** to **claims 1-7**, as presented in the request and claim charts, teaches away from the limitation of "*detecting an object in a video from a single camera*" because **Courtney-NPL's** *camera* is being modified by the <u>multiple</u> smart cameras of **Olson**'s *figure 4* thereby resulting in a system/method that detects an object in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of **claims 1-7** because the teaching of **Olson**, as presented in the request and claim charts, teaches away from the claimed invention.

Issue (I)

Requester proposed that **claims 1-7** are obvious over **Courtney-EP** and **Brill**. The examiner agrees that this obviousness rejection over **Courtney-EP** and **Brill** has a

reasonable likelihood of prevailing because the general application of **Courtney-EP** to

claims 1-7 in the claim charts appears reasonable. (*request pgs. 62-63 and claim charts*

pgs. 796-846) Also, the examiner is able to discern that this disclosure of **Courtney-EP**

combined with **Brill** is reasonably likely to prevail because *figure 1* of **Courtney-EP** and

Brill disclose identical systems for which the methods employed by the respective

systems are likely to be obvious over one another. For the reader's convenience, *figure*

1 of **Courtney-EP** and *figure 1* of **Brill** are reproduced below.
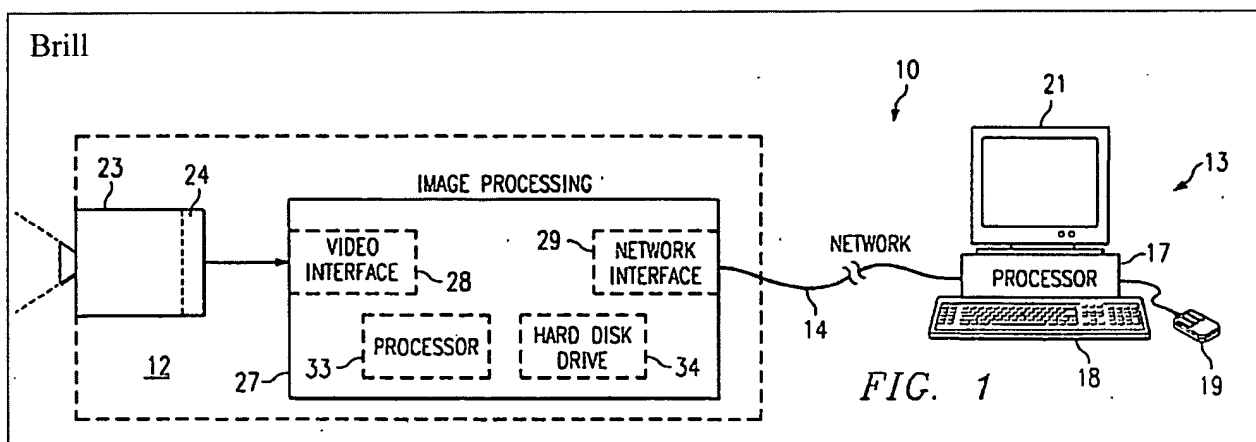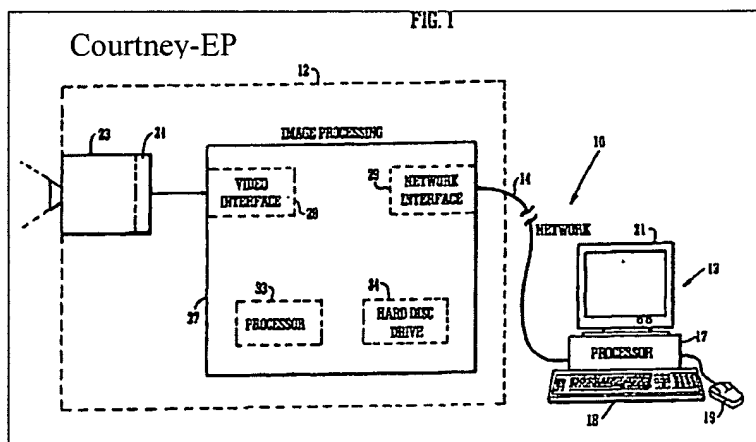
Therefore, requester has shown a reasonable likelihood of prevailing with respect

to this proposed obviousness rejection of **claims 1-7**.

Issue (J)

Requester proposed that **claims 1-7** are obvious over **Courtney-NPL** and **Brill**.

The request and claim charts allege that **Courtney-NPL** discloses limitations of **claims**

1-7 and **Brill** teaches limitations of **claims 1-7**. (*request pgs. 57-62 and claim charts pgs.*

548-590)

Requester cites both **Courtney-NPL** and **Brill** for the single limitation of *"wherein*

the plurality of attributes that are detected are independent of which event is identified".

(*claim charts pgs. 563-566*) Since requester is citing both **Courtney-NPL** and **Brill** for this

single limitation, the examiner considers the combination of **Courtney-NPL** and **Brill**, as

presented in the request and claim charts, is required to meet this limitation.

Requester cites **Courtney-NPL** *pg. 610: col.1, pg. 612:cols.1- 2, pg. 614:col.2 to pg.*

615:cols.1-2, and figure 5 as disclosing this limitation and requester cites **Brill** *col.1:43-48,*

col.3:24-27, col.3:41-49, col.4:27-30 as teaching this claim limitation.

However, the motion segmentation, object tracking, hypothetical sequence of 1-D

frames, motion analysis stage, V-object indexing, depositor, and remover as disclosed

by **Courtney-NPL** and modified by **Brill**'s teaching of a "surveillance system

programmed to generate an alarm upon occurrence of a complex event made up of a

series of simple events" does not disclose or suggest that these stages of **Courtney-**

NPL are independent of the identified complex event made up of simple events. For at

least this reason, the examiner does not agree that this obviousness rejection over

Courtney-NPL and **Brill** has a reasonable likelihood of prevailing.

Issue (K)

Requester proposed that **claims 1-7** are obvious over the combination of **Winter,**

Lipton, and **Brill**. For the proposed rejection of **claims 1-7**, Requester provides a

detailed application of the combination of **Winter, Lipton**, and **Brill** to **claims 1-7** in the

request (*pgs. 65-73*) and the claim charts. (*pgs. 1315-1358*)

Requester cites **Winter** and **Brill** for the single limitation of "*wherein the plurality*

of attributes that are detected are independent of which event is identified" (*claim charts*

pgs. 1334-1335) Since requester is citing **Winter** and **Brill** for this single limitation, the

examiner considers the combination of **Winter** and **Brill**, as presented in the request

and claim charts, is required to meet this limitation.

Requester cites **Winter** *col.3:23-32 and col.73:56-64* as disclosing this limitation.

For the reader's convenience, these portions of **Winter** are reproduced below.

> According to still a further aspect of the invention, there is provided apparatus for analyzing video data, including a source of video data and a device for analyzing the video data provided by the source of video data to detect a first predetermined characteristic of the video data by performing a first predetermined analysis algorithm, and for performing a second predetermined analysis algorithm to detect a second predetermined characteristic of the video data when the analysis device detects the first predetermined characteristic. 25 30

> different characteristics of an incoming video stream. It is determined at step 2348 whether a first characteristic is present in an incoming stream of video images, by application of a first image analysis algorithm. If at step 2348 it is determined that the predetermined characteristic has been detected by the first analysis algorithm, then step 2350 follows, at which it is determined whether a second predetermined characteristic has been detected in the same incoming video stream using a second analysis algorithm. If so, 60

Requester cites **Brill** _col.1:43-48, col.3:24-27, col.3:41-49, and col.4:27-30_ as

teaching this limitation. For the reader's convenience, these portions of **Brill** are

reproduced below.

> Given a system which detects simple events, one can
> easily create a user interface that enables someone to define
> a complex event by constructing a list of sub-events. After 45
> one or more complex events have been defined, the sub-
> events of complex events defined later can be complex
> events themselves. As an alternative user interface, complex

> The basic system performs three data processing steps for
> every image of a video sequence to recognize events. The 25
> three steps are detecting objects, tracking objects, and ana-
> lyzing the motion graph.

> Finally, to recognize events, the system analyzes the
> motion graph. The preferred, embodiment of the system
> recognizes the following vocabulary of events: ENTER,
> EXIT, REST, MOVE, DEPOSIT, REMOVE, LIGHTS-ON
> and LIGHTS-OUT. These events are examples of the most 45
> common in an office environment where the main interac-
> tion is between people and smaller stationary objects. Other
> examples would be applicable to monitoring outdoors, such
> as a parking lot.

> In the present invention the surveillance system can be
> programmed to only generate an alarm upon the occurrence
> of a complex event made up of a series of simple events. 30
> Returning to the THEFT example, a better system would

As evidenced by the above disclosures, the combination of **Winter** and **Brill**

does not teach or make obvious _"wherein the plurality of attributes that are detected are_

independent of which event is identified" because the three data processing steps of

Brill's basic system for processing images of a video sequence to recognize events are

not disclosed as independent of ENTER, EXIT, REST, MOVE, DEPOSIT, REMOVE,

LIGHTS-ON, and LIGHT—OUT. As such, for at least this reason, Requester has <u>not</u>

shown a reasonable likelihood of prevailing with respect to this proposed obviousness

rejection.

Issue (L)

Requester proposed that **claims 1-7** are obvious over the combination of **Paek,**

Qian, and **Courtney-US**. For the proposed rejection of **claims 1-7**, Requester provides

a detailed application of the combination of **Paek, Qian,** and **Courtney-US** to **claims 1-**

7 in the request (*pgs. 73-79*) and the claim charts. (*pgs. 1587-1625*)

Requester cites **Paek, Qian,** and **Courtney-US** for the single limitation of

"*selecting a new user rule after detecting the plurality of attributes*". (*claim charts pgs.*

1594-1596) Since requester is citing **Paek, Qian,** and **Courtney-US** for this single

limitation, the examiner considers the combination of **Paek, Qian,** and **Courtney-US**, as

presented in the request and claim charts, is required to meet this limitation.

Requester cites **Paek** *col.18:20-28 and col.73:56-64* as disclosing this limitation.

Requester cites **Courtney-US** *col.4:45-52, fig. 4, and col.5:4-14* as teaching this limitation.

First, **Paek's** video object hierarchy descriptions do not disclose or make obvious

selecting a new user rule after detecting the plurality of attributes" because selection of

a rule, new or otherwise, is not discussed at all in this citation of **Paek**. Further,

Courtney-US's disclosure of "show me all objects that are removed from this region of

the scene" is not a 'new user rule' as claimed. As such, for at least this reason,

Requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this
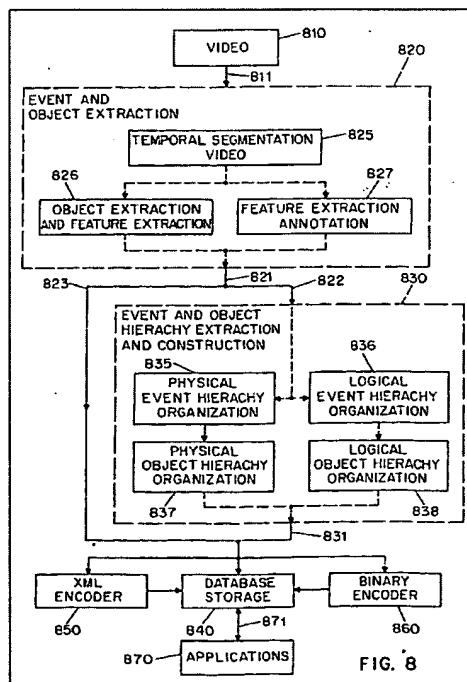
proposed obviousness rejection of **claims 1-7**.

Issue (N)

Requester proposed that **claims 1-7** are obvious over the combination of **Paek**,

Qian, and **Shotton**. For the proposed rejection of **claims 1-7**, Requester provides a

detailed application of the combination of **Paek**, **Qian**, and **Shotton** to **claims 1-7** in the

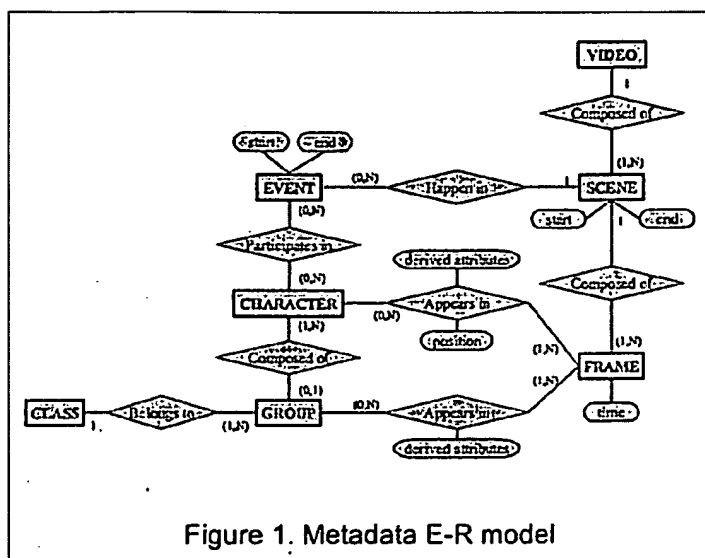request (*pgs. 81-82*) and the claim charts. (*pgs. 1837-1877*)

As to the limitation of "*detecting an object in a video from a single camera*",

requester cites **Paek** as disclosing this limitation and **Shotton** as teaching this limitation.

(*claim charts pgs. 1837-1840*) Since requester is citing **Paek** and **Shotton** for this single

limitation, the examiner considers the combination of **Paek** and **Shotton**, as presented

in the request and claim charts, is required to meet this limitation.

Requester cites **Paek** *col. 17:26-61 and figure 8* as meeting this limitation. For the

reader's convenience **Paek**'s *figure 8* is reproduced below.

FIG. 8

Requester cites **Shotton** _§§2, 2.3, and figure 3_ as teaching this limitation. For the

reader's convenience, _figure 1_ of **Shotton**, which is described in _§2_ and models how the

specific intrinsic metadata data of the video content is stored, is reproduced below.

Figure 1. Metadata E-R model

This portion of **Shotton**, however, is silent as to the number of cameras and

Paek's _video #810_ is not disclosed as a single camera but rather is disclosed merely as

video data (_col.17:26-61_). As such, the examiner does not agree that this obviousness

rejection over **Paek, Qian,** and **Shotton** has a reasonable likelihood of prevailing

because the general application of the combination of **Paek, Qian,** and **Shotton** to

claims 1-7, as presented in the request and claim charts, does not disclose or make

obvious "_detecting an object in a video from a single camera_".
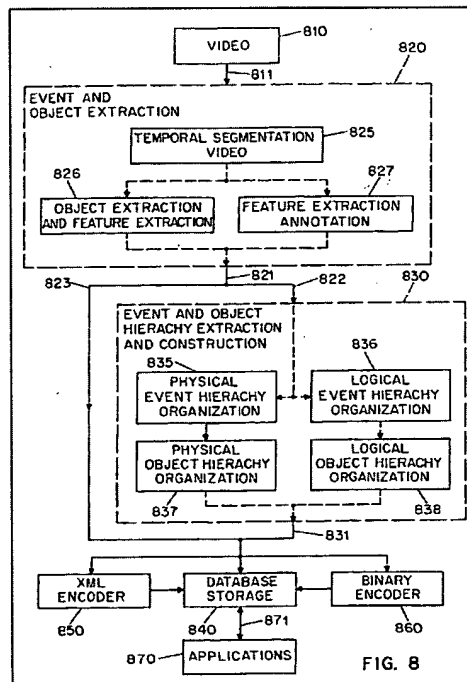
Issue (P)

Requester proposed that **claims 1-7** are obvious over the combination of **Paek,**

Qian, Courtney-EP, and **Olson**. The request and claim charts allege that **Paek**

discloses limitations of **claims 1-7** and **Qian**, **Courtney-EP**, and **Olson** teaches

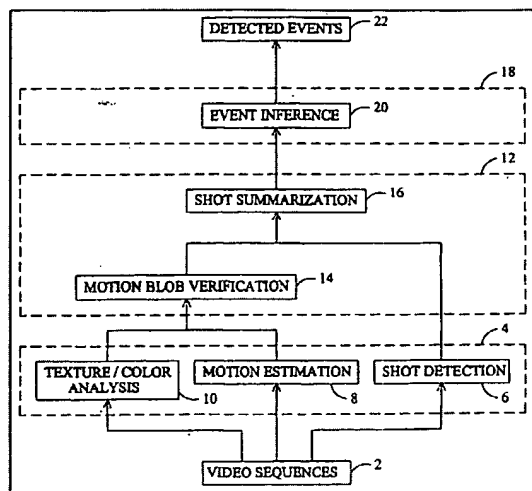limitations of **claims 1-7**. (*request pgs. 84-85 and claim charts pgs. 2139-2212*)

As to the limitation of "*detecting first and second objects in a video from a single*

camera", requester cites **Paek** as disclosing this limitation and **Qian, Courtney-EP**, and

Olson as teaching this limitation. (*claim charts pgs. 2139-2147*) Since requester is citing

Paek, **Qian**, **Courtney-EP**, and **Olson** for this single limitation, the examiner considers

the combination of **Paek**, **Qian**, **Courtney-EP**, and **Olson**, as presented in the request

and claim charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col.17:26-61 and figure 8*. For

the reader's convenience **Paek**'s *figure 8* is reproduced below.
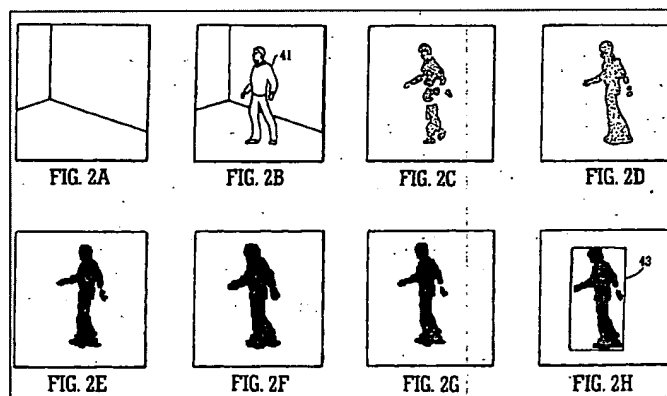

FIG. 8

Requester cites **Qian** as teaching this limitation at *col.2:55 to col.3:8 and figure 1*.
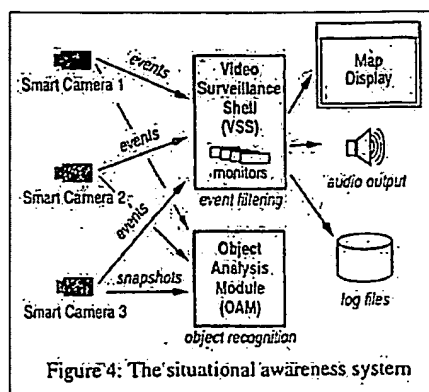
For the reader's convenience, *figure 1* of **Qian** is reproduced below.

Requester cites **Courtney-EP** as disclosing this limitation in ¶¶*[0002], [0017],*

[0028] to [0034, and figure 2. For the reader's convenience, *figure 2* of **Courtney-EP** is

reproduced below.

FIG. 2A   FIG. 2B   FIG. 2C   FIG. 2D

FIG. 2E   FIG. 2F   FIG. 2G   FIG. 2H

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does not agree that this obviousness rejection over **Paek, Qian, Courtney-EP, and Olson** has a reasonable likelihood of prevailing because the general application of the combination of **Paek, Qian, Courtney-EP**, and **Olson** to <u>claims 1-7</u> in the request and claim charts teaches away from the limitation of "*detecting an object in a video from a <u>single</u> camera*" because the combination of **Paek, Qian,** and **Courtney-EP** is ultimately being modified by the <u>multiple</u> smart cameras of **Olson**'s *figure 4* thereby resulting in a system/method that detects an object in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of <u>claims 1-7</u> because the teaching of **Olson**, as presented in the request and claim charts, teaches away from the claimed invention.

Issue (Q)

Requester proposed that <u>claims 1-7</u> are obvious over the combination of **Paek, Qian, Courtney-EP**, and **Brill**. For the proposed rejection of <u>claims 1-7</u>, Requester provides a detailed application of the combination of **Paek, Qian, Courtney-EP**, and **Brill** to <u>claims 1-7</u> in the request (*pgs. 87-88*) and the claim charts. (*pgs. 3032-3109*)

As to the limitation of "*selecting a new user rule after detecting the plurality of attributes*", Requester cites **Paek** as disclosing this limitation and **Courtney-EP** and **Brill** as teaching this limitation. (*claim charts pgs. 3054-3058*) Since requester is citing **Paek**, **Courtney-EP**, and **Brill** for this single limitation, the examiner considers the combination of **Paek**, **Courtney-EP**, and **Brill**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col.18:20-28*. Requester cites **Courtney-EP** as disclosing this limitation at *[0069] to [0071] and figure 9*. Requester cites **Brill** as disclosing this limitation at *col.10:59 to col.11:25, fig. 7, col.4:27-36*.

First, **Paek's** video object hierarchy descriptions do not disclose or make obvious this limitation because selection of a rule, new or otherwise, is not discussed in this citation of **Paek**. Further, in the context of requester's proposed rejection, **Courtney-EP's** *event selection box #136* does not make obvious the claimed 'new user rule' because **Courtney-EP's** disclosed events, such as LOITERING, is selected *prior* to detecting the claimed plurality of attributes, not *after* detecting the claimed plurality of attributes. In addition, **Brill's** definition of simple and/or complex events does not make obvious this limitation because, as presented in the claim charts, there is no suggestion of selecting a new user rule in response to the detection of one of the complex events, such as *THEFT EVENT*, made up of a series of simple events such as the *REMOVE EVENT* followed by the *EXIT EVENT*. As such, for at least these reasons, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of **claims 1-7**.

Issue (R)

Requester proposed that **claims 1-7** are obvious over the combination of **Paek,**

Qian, Courtney-NPL, and **Brill**. For the proposed rejection of **claims 1-7**, Requester

provides a detailed application of the combination of **Paek, Qian, Courtney-NPL**, and

Brill to **claims 1-7** in the request (*pgs. 85-86*) and the claim charts. (*pgs. 2628-2693*)

As to the limitation of "*selecting a new user rule after detecting the plurality of*

attributes", requester cites **Paek** as disclosing this limitation and **Courtney-NPL** and

Brill as teaching this limitation. (*claim charts pgs. 2642-2646*) Since requester is citing

Paek, Courtney-NPL, and **Brill** for this single limitation, the examiner considers the

combination of **Paek, Courtney-NPL**, and **Brill**, as presented in the request and claim

charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col.18:20-28*. Requester cites

Courtney-NPL as disclosing this limitation at *pg. 607 cols. 1 to 2, pg. 616 col.1, pg. 617*

col.2 to pg. 618 cols. 1 and 2. Requester cites **Brill** as disclosing this limitation at *col.10:59*

to col.11:25, fig. 7, col.4:27-36.

First, **Paek's** video object hierarchy descriptions do not disclose or make obvious

this limitation because selection of a rule, new or otherwise, is not discussed in this

citation of **Paek**. Further, in the context of Requester's proposed rejection, **Courtney-**

NPL's context based retrieval system by which the automatic video indexing (AVI)

system may specify queries on video sequences does not make obvious the claimed

'new user rule' because **Courtney-NPL**'s disclosed queries, such as "show me all

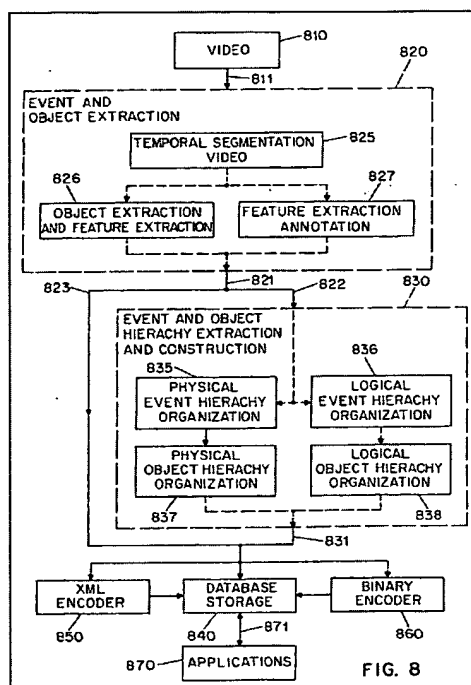objects that were removed from this region of the scene between 8am and 9am", is

selected *prior* to detecting the claimed plurality of attributes, not *after* detecting the

claimed plurality of attributes. In addition, **Brill**'s definition of simple and/or complex

events does not make obvious this limitation because, as presented in the claim charts,

there is no suggestion of selecting a new user rule in response to the detection of one of

the complex events, such as *THEFT EVENT*, made up of a series of simple events such

as the *REMOVE EVENT* followed by the *EXIT EVENT*. As such, for at least these

reasons, Requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to

this proposed obviousness rejection of **claims 1-7**.

Issue (S)

Requester proposed that **claims 1-7** are obvious over the combination of **Paek**,

Qian, **Courtney-NPL**, and **Olson**. The request and claim charts allege that **Paek**

discloses limitations of **claims 1-7** and **Qian**, **Courtney-NPL**, and **Olson** teach

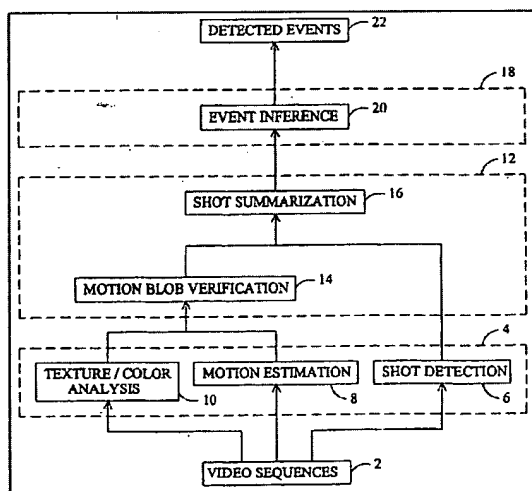limitations of **claims 1-7**. (*request pgs. 88-89 and claim charts pgs. 3531-3586*)

As to the limitation of "*detecting an object in a video from a single camera*",·

Requester cites **Paek** as disclosing this limitation and **Qian, Courtney-NPL,** and **Olson**

as teaching this limitation. (*claim charts pgs. 3531-3534*) Since requester is citing **Paek**,

Courtney-NPL, Qian, and **Olson** for this single limitation, the examiner considers the

combination of **Paek, Courtney-NPL, Qian,** and **Olson**, as presented in the request

and claim charts, is required to meet the limitation of "*detecting first and second objects*

in a video from a single camera".

Requester cites **Paek** as disclosing this limitation at *col.17:26-61 and figure 8*. For

the reader's convenience **Paek**'s *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at _col.2:55 to col.3:8 and figure 1_.

For the reader's convenience, _figure 1_ of **Qian** is reproduced below.

Requester cites **Courtney-NPL** as disclosing this limitation in _pg. 616, col.2, figure 13, pg. 608, col.2, figure 1, pg. 609, cols. 1 and 2, and figure 13_. For the reader's convenience, _figure 13_ of **Courtney-NPL** is reproduced below.
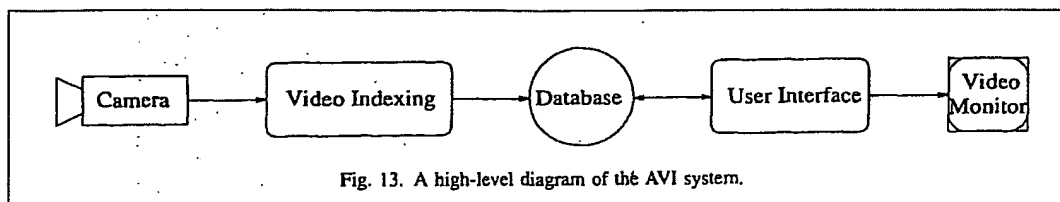
Fig. 13. A high-level diagram of the AVI system.

Requester cites **Olson** as teaching this limitation at _pg. 166, col. 1 and figure 4_.

For the reader's convenience, _figure 4_ of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection has a reasonable

likelihood of prevailing because the general application of the combination of **Paek**,

Qian, **Courtney-NPL**, and **Olson** to <u>**claims 1-7**</u>, as presented in the request and claim

charts, teaches away from the limitation of "_detecting an object in a video from a single_

camera" because the combination of **Paek, Qian,** and **Courtney-EP** is ultimately being

modified by the <u>multiple</u> smart cameras of **Olson's** _figure 4_ thereby resulting in a

system/method that detects an object in videos from <u>multiple</u> cameras and not the

claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable

likelihood of prevailing with respect to this proposed obviousness rejection of <u>**claims 1-7**</u>

because the teaching of **Olson**, as presented in the request and claim charts, teaches

away from the claimed invention.

CLAIM 8

For the reasons set forth below, the following issues have been determined to

have a reasonable likelihood of prevailing for the identified claims, and will be

addressed in the non-final action.

      Issue (F):   **Claim 8** obvious over **Shotton** and **Brill**.

      Issue (I):   **Claim 8** obvious over **Courtney-EP** and **Brill**.

For the reasons set forth below, the following issues have been determined to

NOT have a reasonable likelihood of prevailing for the identified claims, and will NOT be

addressed in the non-final action.

      Issue (C):   **Claim 8** obvious over **Courtney-US** and **Olson**.

      Issue (G):   **Claim 8** obvious over **Courtney-EP** and **Olson**.

      Issue (H):   **Claim 8** obvious over **Courtney-NPL** and **Olson**.

      Issue (J):   **Claim 8** obvious over **Courtney-NPL** and **Brill**.

      Issue (K):   **Claim 8** obvious over **Winter**, **Lipton**, and **Brill**.

      Issue (M):   **Claim 8** obvious over **Paek, Qian, Courtney-US**, and **Olson**.

      Issue (O):   **Claim 8** obvious over **Paek, Qian, Shotton**, and **Brill**.

      Issue (P):   **Claim 8** obvious over **Paek, Qian, Courtney-EP**, and **Olson**.

      Issue (Q):   **Claim 8** obvious over **Paek, Qian, Courtney-EP**, and **Brill**.

      Issue (R):   **Claim 8** obvious over **Paek, Qian, Courtney-NPL**, and **Brill**.

      Issue (S):   **Claim 8** obvious over **Paek, Qian, Courtney-NPL**, and **Olson**.
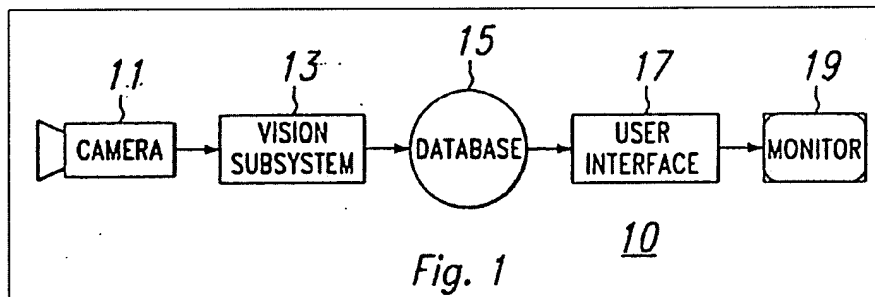
Issue (C)

Requester proposed that **claim 8** is obvious over the combination of **Courtney-US** and **Olson**. The request and claim charts allege that **Courtney-US** discloses
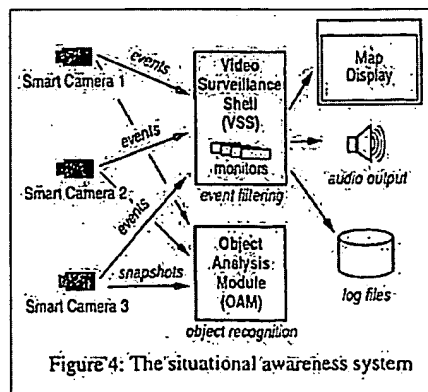
limitations of **claim 8** and **Olson** teaches limitations of **claim 8**. (*request pgs. 33-38 and*

claim charts pgs. 57-67)

Requester cites both **Courtney-US** and **Olson** for the single limitation of

"*detecting first and second objects in a video from a single camera*". (*claim charts pgs.*

57-58) Since requester is citing **Courtney-US** and **Olson** for this single limitation, the

examiner considers the combination of **Courtney-US** and **Olson**, as presented in the

request and claim charts, is required to meet this limitation.

Requester cites **Courtney-US** *col.3:65 to col.4:6, col.5:44-47, col.4:29-31, and*

figures 1 and 5 as disclosing this limitation. For the reader's convenience, *figure 1* of

Courtney-US is reproduced below.

Fig. 1

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does not agree that this obviousness rejection over **Courtney-US** and **Olson** has a reasonable likelihood of prevailing because the general application of the combination of **Courtney-US** and **Olson** to **claim 8**, as presented n the request and claim charts, teaches away from the limitation of "*detecting first and second objects in a video from a single camera*" because **Courtney-US's** *camera 11* is being modified by the multiple smart cameras of **Olson's** *figure 4* thereby resulting in a system/method that detects objects in videos from multiple cameras and not the claimed single camera. For at least this reason, requester has not shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of **claim 8** because the teaching of **Olson**, as presented in the request and claim charts, teaches away from the claimed invention.

Issue (F)

Requester proposed that **claim 8** is obvious over **Shotton** and **Brill**. The examiner agrees that this obviousness rejection over **Shotton** and **Brill** has a reasonable likelihood of prevailing because the general application of the combination of **Shotton** and **Brill** to **claim 8** in the claim charts appears reasonable. (*request pgs. 43-51 and claim charts pgs. 159-178*) The examiner is able to discern that **Brill** is being cited for the limitations of **claim 8** that are not present in **claims 1-7, 9-13, and 15-28**, for which an anticipation rejection over **Shotton** has a reasonable likelihood of prevailing. Therefore, requester has shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection over the combination of **Shotton** and **Brill** of **claim 8**.
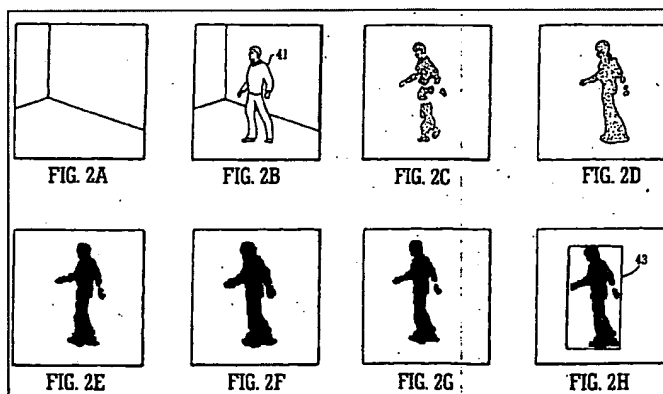
Issue (G)

Requester proposed that **claim 8** is obvious over the combination of **Courtney-EP** and **Olson**. The request and claim charts allege that **Courtney-EP** discloses limitations of **claim 8** and **Olson** teaches limitations of **claim 8**. (*request pgs. 51-57 and claim charts pgs. 289-316*)

As to the limitation of "*detecting first and second objects in a video from a single camera*", requester cites **Courtney-EP** as disclosing this limitation and **Olson** as teaching this limitation. (*claim charts pgs. 289-294*) Since requester is citing **Courtney-EP** and **Olson** for this single limitation, the examiner considers the combination of **Courtney-EP** and **Olson**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Courtney-EP** as disclosing this limitation in *¶¶[0002], [0017], [0028] to [0034], and figure 2*. For the reader's convenience, *figure 2* of **Courtney-EP** is reproduced below.

FIG. 2A   FIG. 2B   FIG. 2C   FIG. 2D

FIG. 2E   FIG. 2F   FIG. 2G   FIG. 2H

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*. For the reader's convenience, *figure 4* of **Olson** is reproduced below.
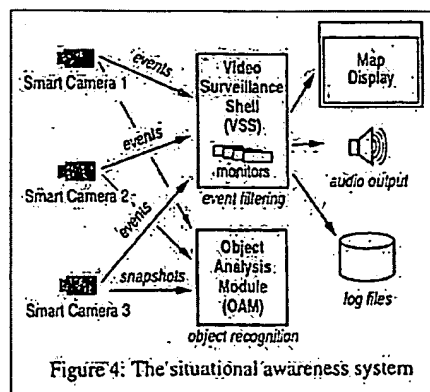
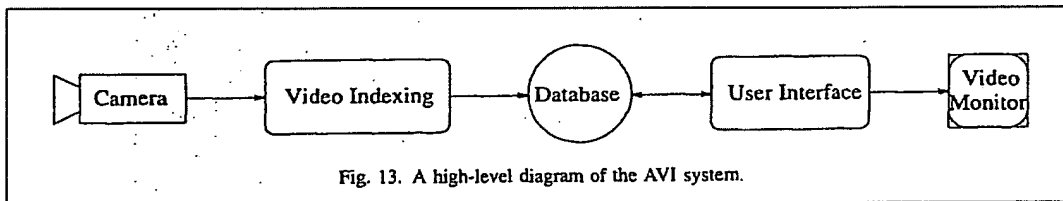Figure 4: The situational awareness system

The examiner does not agree that this obviousness rejection over **Courtney-EP** and **Olson** has a reasonable likelihood of prevailing because the general application of the combination of **Courtney-EP** and **Olson** to **claim 8**, as presented in the request and claim charts, teaches away from the limitation of "*detecting first and second objects in a video from a single camera*" because **Courtney-EP** is being modified by the multiple smart cameras of **Olson**'s *figure 4* thereby resulting in a system/method that detects objects in videos from multiple cameras and not the claimed single camera. For at least this reason, requester has not shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of **claim 8** because the teaching of **Olson**, as presented in the request and claim charts, teaches away from the claimed invention.
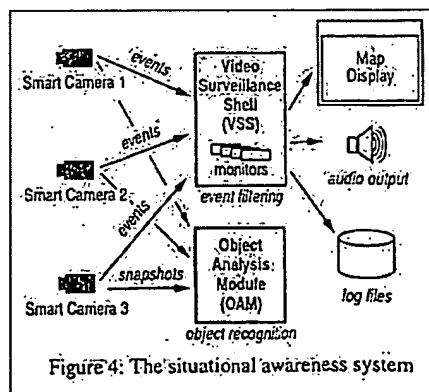
Issue (H)

Requester proposed that **claim 8** is obvious over the combination of **Courtney-NPL** and **Olson**. The request and claim charts allege that **Courtney-NPL** discloses limitations of **claim 8** and **Olson** teaches limitations of **claim 8**. (*request pgs. 63-64 and claim charts pgs. 1143-1162*)

As to the limitation of "*detecting first and second objects in a video from a single camera*", requester cites **Courtney-NPL** as disclosing this limitation and **Olson** as teaching this limitation. (*claim charts pgs. 1143-1145*) Since requester is citing **Courtney-NPL** and **Olson** for this single limitation, the examiner considers the combination of **Courtney-NPL** and **Olson**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Courtney-NPL** as disclosing this limitation in *pg. 616, col.2, figure 13, pg. 608, col.2, figures 1-2, pg. 609, cols. 1 and 2, and figure 13*. For the reader's convenience, *figure 13* of **Courtney-NPL** is reproduced below.

Camera → Video Indexing → Database ← User Interface → Video Monitor

Fig. 13. A high-level diagram of the AVI system.

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*. For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Smart Camera 1 — events → Video Surveillance Shell (VSS) — monitors — event filtering
Smart Camera 2 — events
Smart Camera 3 — snapshots → Object Analysis Module (OAM) — object recognition
Map Display
audio output
log files

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection over **Courtney-NPL** and **Olson** has a reasonable likelihood of prevailing because the general application of

the combination of **Courtney-NPL** and **Olson** to <u>**claim 8**</u>, as presented in the request

and claim charts, teaches away from the limitation of "*detecting first and second objects*

in a video from a single camera" because **Courtney-NPL**'s <u>*camera*</u> is being modified by

the multiple smart cameras of **Olson**'s <u>*figure 4*</u> thereby resulting in a system/method that

detects objects in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera. For

at least this reason, requester has <u>not</u> shown a reasonable likelihood of prevailing with

respect to this proposed obviousness rejection of <u>**claim 8**</u> because the teaching of

Olson, as presented in the request and claim charts, teaches away from the claimed

invention.

<u>Issue (I)</u>

Requester proposed that <u>**claim 8**</u> is obvious over **Courtney-EP** and **Brill**. The

examiner agrees that this obviousness rejection over **Courtney-EP** and **Brill** has a

reasonable likelihood of prevailing because the general application of **Courtney-EP** to

<u>**claim 8**</u> in the claim charts appears reasonable (<u>*request pgs. 62-63 and claim charts pgs.*</u>

<u>*847-875*</u>) Also, the examiner is able to discern that this disclosure of **Courtney-EP**

combined with **Brill** is reasonably likely to prevail because <u>*figure 1*</u> of **Courtney-EP** and

Brill disclose identical systems for which the methods employed by the respective

systems are likely to be obvious over one another. Therefore, requester has shown a

reasonable likelihood of prevailing with respect to this proposed obviousness rejection

of <u>**claim 8**</u>.

Issue (J)

Requester proposed that **claim 8** is obvious over **Courtney-NPL** and **Brill**. The

request and claim charts allege that **Courtney-NPL** discloses limitations of **claim 8** and

Brill teaches limitations of **claim 8**. (*request pgs. 57-62 and claim charts pgs. 591-614*)

Requester cites both **Courtney-NPL** and **Brill** for the single limitation of "*wherein*

the plurality of attributes that are detected are independent of which event is identified".

(*claim charts pgs. 606-609*) Since requester is citing **Courtney-NPL** and **Brill** for this

single limitation, the examiner considers the combination of **Courtney-NPL** and **Brill**, as

presented in the request and claim charts, is required to meet this limitation.

Requester cites **Courtney-NPL** *pg. 610: col.1, pg. 612:cols.1- 2, pg. 614:col.2 to pg.*

615:cols.1-2, and figure 5 as disclosing this limitation and requester cites **Brill** *col.1:43-48,*

col.3:24-27, col.3:41-49, col.4:27-30 as teaching this claim limitation.

However, the motion segmentation, object tracking, hypothetical sequence of 1-D

frames, motion analysis stage, V-object indexing, depositor, and remover as disclosed

by **Courtney-NPL** and modified by **Brill**'s teaching of a "surveillance system

programmed to generate an alarm upon occurrence of a complex event made up of a

series of simple events" does not disclose or suggest that these stages of **Courtney-**

NPL are independent of the identified complex event made up of simple events. For at

least this reason, the examiner does <u>not</u> agree that this obviousness rejection over

Courtney-NPL and **Brill** has a reasonable likelihood of prevailing.

Issue (K)

Requester proposed that **claim 8** is obvious over the combination of **Winter,**

Lipton, and **Brill**. For the proposed rejection of **claim 8**, requester provides a detailed

application of the combination of **Winter**, **Lipton**, and **Brill** to **claim 8** in the request

(*pgs. 65-73*) and the claim charts. (*pgs. 1359-1383*)

Requester cites **Winter** and **Brill** for the single limitation of *"wherein the plurality*

of attributes that are detected are independent of which event is identified". (*claim charts*

pgs. 1379-1380) Since requester is citing **Winter** and **Brill** for this single limitation, the

examiner considers the combination of **Winter** and **Brill**, as presented in the request

and claim charts, is required to meet this limitation.

Requester cites **Winter** *col.3:23-32 and col.73:56-64* as disclosing this limitation.

For the reader's convenience, these portions of **Winter** are reproduced below.

> According to still a further aspect of the invention, there is provided apparatus for analyzing video data, including a source of video data and a device for analyzing the video data provided by the source of video data to detect a first predetermined characteristic of the video data by performing a first predetermined analysis algorithm, and for performing a second predetermined analysis algorithm to detect a second predetermined characteristic of the video data when the analysis device detects the first predetermined characteristic.

> different characteristics of an incoming video stream. It is determined at step **2348** whether a first characteristic is present in an incoming stream of video images, by application of a first image analysis algorithm. If at step **2348** it is determined that the predetermined characteristic has been detected by the first analysis algorithm, then step **2350** follows, at which it is determined whether a second predetermined characteristic has been detected in the same incoming video stream using a second analysis algorithm. If so,

Requester cites **Brill** *col.1:43-48, col.3:24-27, col.3:41-49, and col.4:27-30* as

teaching this limitation. For the reader's convenience, these portions of **Brill** are

reproduced below.

> Given a system which detects simple events, one can easily create a user interface that enables someone to define a complex event by constructing a list of sub-events. After one or more complex events have been defined, the sub-events of complex events defined later can be complex events themselves. As an alternative user interface, complex

> The basic system performs three data processing steps for every image of a video sequence to recognize events. The three steps are detecting objects, tracking objects, and analyzing the motion graph.

> Finally, to recognize events, the system analyzes the motion graph. The preferred, embodiment of the system recognizes the following vocabulary of events: ENTER, EXIT, REST, MOVE, DEPOSIT, REMOVE, LIGHTS-ON and LIGHTS-OUT. These events are examples of the most common in an office environment where the main interaction is between people and smaller stationary objects. Other examples would be applicable to monitoring outdoors, such as a parking lot.

> In the present invention the surveillance system can be programmed to only generate an alarm upon the occurrence of a complex event made up of a series of simple events. Returning to the THEFT example, a better system would

As evidenced by the above disclosures, the combination of **Winter** and **Brill**

does not teach or make obvious *"wherein the plurality of attributes that are detected are*

independent of which event is identified" because the three data processing steps of

Brill's basic system for processing images of a video sequence to recognize events are

not disclosed as independent of ENTER, EXIT, REST, MOVE, DEPOSIT, REMOVE,

LIGHTS-ON, and LIGHT—OUT. As such, for at least this reason, Requester has <u>not</u>
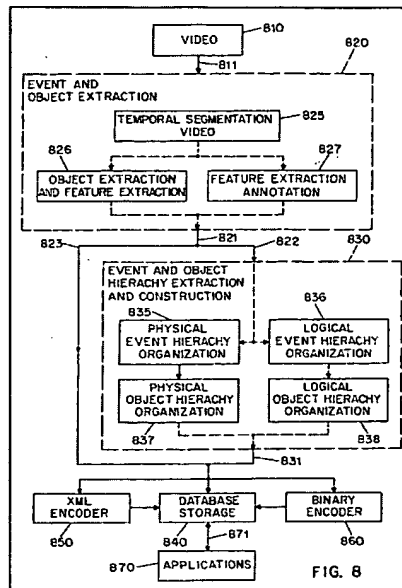
shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection.

Issue (M)

Requester proposed that **claim 8** is obvious over the combination of **Paek**, **Qian**, **Courtney-US**, and **Olson**. For the proposed rejection of **claim 8**, Requester provides a detailed application of the combination of **Paek**, **Qian**, **Courtney-US**, and **Olson** to **claim 8** in the request (*pgs. 79-81*) and the claim charts. (*pgs. 1733-1758*)
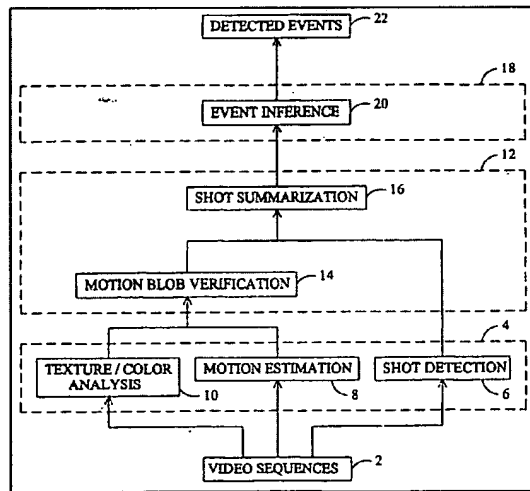
As to the limitation of "*detecting first and second objects in a video from a single camera*", requester cites **Paek**, **Qian**, and **Courtney-US** as disclosing this limitation and **Olson** as teaching this limitation. (*claim charts pgs. 1733-1736*) Since requester is citing **Paek**, **Qian**, and **Courtney-US** and **Olson** for this single limitation, the examiner considers the combination of **Paek**, **Qian**, and **Courtney-US** and **Olson**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col. 17:26-61 and figure 8*. For the reader's convenience **Paek**'s *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at *col.2:55 to col.3:8 and figure 1*.

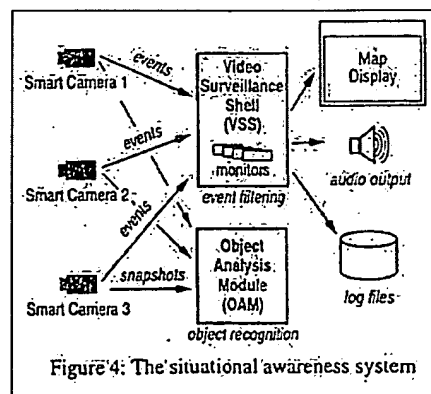For the reader's convenience, *figure 1* of **Qian** is reproduced below.

Requester cites **Courtney-US** as disclosing this limitation in *col.3:65-col.4:6, col.4:29-31, figures 1 and 5*. For the reader's convenience, *figure 1* of **Courtney-US** is reproduced below.

Fig. 1   <u>10</u>

Requester cites **Olson** as teaching this limitation at <u>*pg. 166, col. 1 and figure 4*</u>.

For the reader's convenience, <u>*figure 4*</u> of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection over **Paek, Qian, Courtney-US,** and **Olson** has a reasonable likelihood of prevailing because the general

application of the combination of **Paek, Qian, Courtney-US,** and **Olson** to <u>claim 8</u> in

the request and claim charts teaches away from the limitation of "*detecting first and*

second objects in a video from a single camera" because **Paek's** disclosure of multiple

cameras is being modified by **Qian**, which is silent as to the number of cameras, which

in turn is being modified by **Courtney-US**'s disclosure of a single camera, which is

modified by **Olson**'s multiple smart cameras of <u>*figure 4*</u> thereby resulting in a

system/method that detects objects in videos from <u>multiple</u> cameras and not the

claimed <u>single</u> camera. As such, requester has <u>not</u> shown a reasonable likelihood of

prevailing with respect to this proposed obviousness rejection of **claim 8** for at least the reason that the teaching of **Olson**, as presented in the request and claim charts, teaches away from the claimed invention.

Issue (O)

Requester proposed that **claim 8** is obvious over the combination of **Paek**, **Qian**, **Shotton**, and **Brill**. For the proposed rejection of **claim 8**, requester provides a detailed application of the combination of **Paek, Qian, Shotton,** and **Brill** to **claim 8** in the request (*pgs. 82-84*) and the claim charts. (*pgs. 1994-2030*)

As to the limitation of "*after detecting the plurality of attributes, identifying an event that is not one of the detected attributes of the first and second objects by applying the new user rule to the plurality of detected attributes*", requester cites **Paek** as disclosing this limitation and **Qian, Shotton, and Brill** as teaching this limitation. (*claim charts pgs. 2012-2020*) Since requester is citing **Paek, Qian, Shotton,** and **Brill** for this single limitation, the examiner considers the combination of **Paek, Qian, Shotton,** and **Brill**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col. 17:26-61 and figure 8*. For the reader's convenience **Paek's** *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at _col.2:55 to col.3:8 and figure 1_.

For the reader's convenience, _figure 1_ of **Qian** is reproduced below.

Requester cites **Shotton** _section 3 and column 3_ as teaching this limitation. For the reader's convenience, _figure 1_ of **Shotton**, which models how the specific intrinsic metadata data of the video content is stored, is reproduced below.
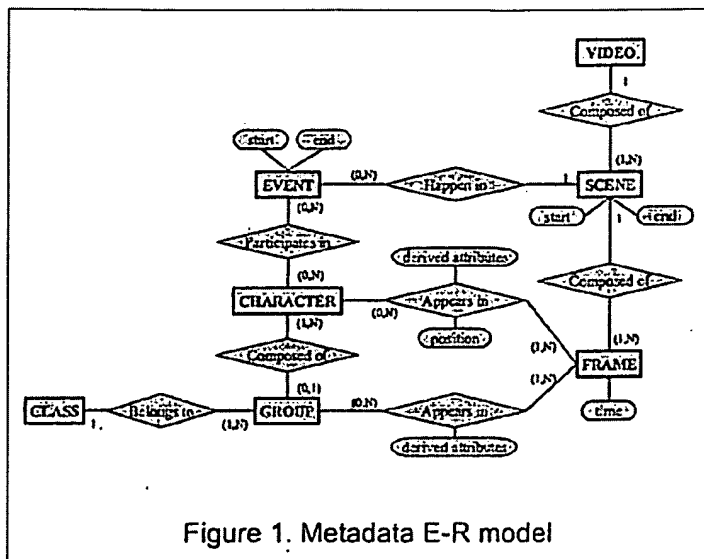
Figure 1. Metadata E-R model

Requester cites **Brill** *col.4:27-36, col.4:61 to col.5:28, fig. 3, col.6:8-30, col.7:45-54, col.8:36-58, and figure 3* as teaching this limitation. For the reader's convenience, *figure 3* of **Brill** is reproduced below.

FIG. 3

First, **Paek**'s *event and object hierarchy extraction and construction #830* identifies the event by the detected attributes *of object extraction and feature extraction #826*.

Consequently, Paek does not disclose the claimed 'identifying an event that is not one

of the detected attributes'.

Second, **Qian** discloses *detected events #22* that are a result of *texture/color analysis*

#10, *motion estimation #8*, and *shot detection #6*. As such, **Qian** does not suggest the

claimed 'identifying an event that is not one of the detected attributes'.

Third, **Shotton**'s metadata model is disclosed as registering "special happenings

in the scenes (events) that can involve characters, and stores specific parameters

defining the who, where, when….happened to whom in these events". (*col.3, 1st ¶ under*

figure 1) In addition, **Shotton**'s *figure 1* discloses that the identified event takes as an

input the derived attributes. As such, **Shotton** does not disclose or suggest identifying

an event that is not one of the detected attributes, as is claimed.

Fourth, **Brill** discloses detecting a series *of simple events #302*, such as REMOVE

and EXIT, to detect a *complex event #309*, such as THEFT. (*see fig. 3 and col.4:30-35*) As

such, Brill discloses the complex event is detected as a function of detected simple

events REMOVE and EXIT. Therefore, **Brill** does not disclose or suggest identifying an

event that is not one of the detected attributes, as claimed.

For the reasons set forth above, the examiner does not agree that this

obviousness rejection over **Paek, Qian, Shotton,** and **Brill** has a reasonable likelihood

of prevailing because the general application of the combination of **Paek, Qian,**

Shotton, and **Brill** to **claim 8**, as presented in the request and claim charts, does not

disclose or make obvious "*after detecting the plurality of attributes, identifying an event*

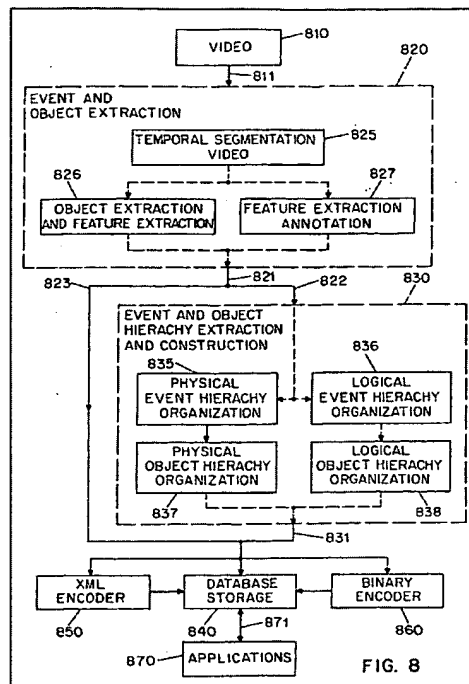*that is not one of the detected attributes of the first and second objects by applying the*

new user rule to the plurality of detected attributes" in combination with the other

limitations of the claims.

Issue (P)

Requester proposed that **claim 8** is obvious over the combination of **Paek**, **Qian**,

Courtney-EP, and **Olson**. The request and claim charts allege that **Paek** discloses

limitations of **claim 8** and **Qian**, **Courtney-EP**, and **Olson** teaches limitations of **claim**
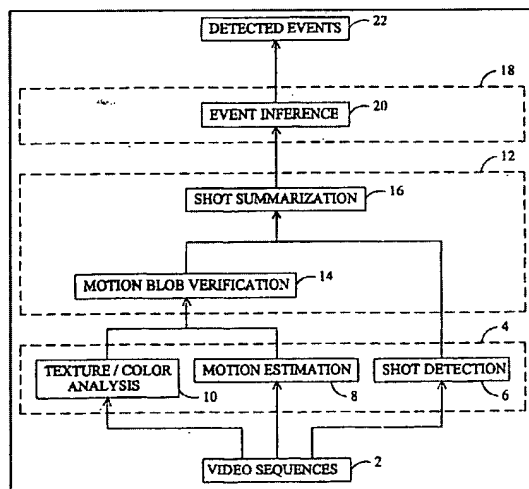
8. (*request pgs. 84-85 and claim charts pgs. 2213-2259*)

As to the limitation of *"detecting first and second objects in a video from a single*

camera", requester cites **Paek** as disclosing this limitation and **Qian, Courtney-EP,** and

Olson as teaching this limitation. (*claim charts pgs. 2213-2221*) Since requester is citing

Paek, Qian, Courtney-EP, and **Olson** for this single limitation, the examiner considers

the combination of **Paek, Qian, Courtney-EP,** and **Olson**, as presented in the request

and claim charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col.17:26-61 and figure 8*. For

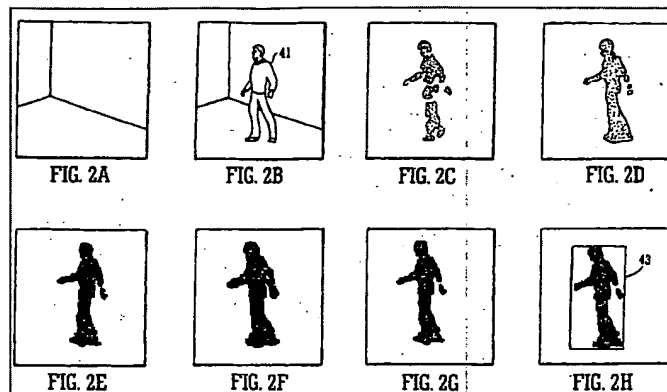the reader's convenience **Paek's** *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at *col.2:55 to col.3:8 and figure 1*.

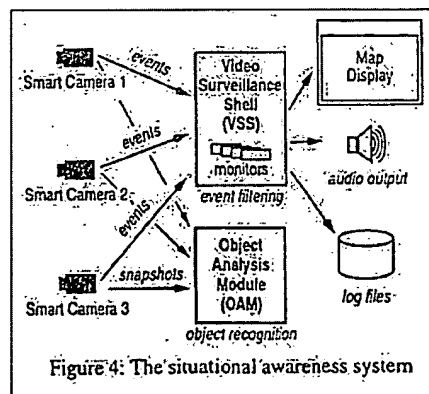For the reader's convenience, *figure 1* of **Qian** is reproduced below.

Requester cites **Courtney-EP** as disclosing this limitation in ¶¶*[0002], [0017],*

[0028] to [0034, and figure 2. For the reader's convenience, *figure 2* of **Courtney-EP** is

reproduced below.

FIG. 2A   FIG. 2B   FIG. 2C   FIG. 2D

FIG. 2E   FIG. 2F   FIG. 2G   FIG. 2H

Requester cites **Olson** as teaching this limitation at _pg. 166, col. 1 and figure 4_.

For the reader's convenience, _figure 4_ of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection has a reasonable

likelihood of prevailing because the general application of the combination of **Paek**,

Qian, **Courtney-EP**, and **Olson** to <u>claim 8</u>, as presented in the request and claim

charts, teaches away from the limitation of "_detecting first and second objects in a video_

from a single camera" because the combination of **Paek, Qian,** and **Courtney-EP** is

ultimately being modified by the <u>multiple</u> smart cameras of **Olson's** _figure 4_ thereby

resulting in a system/method that detects objects in videos from <u>multiple</u> cameras and

not the claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a

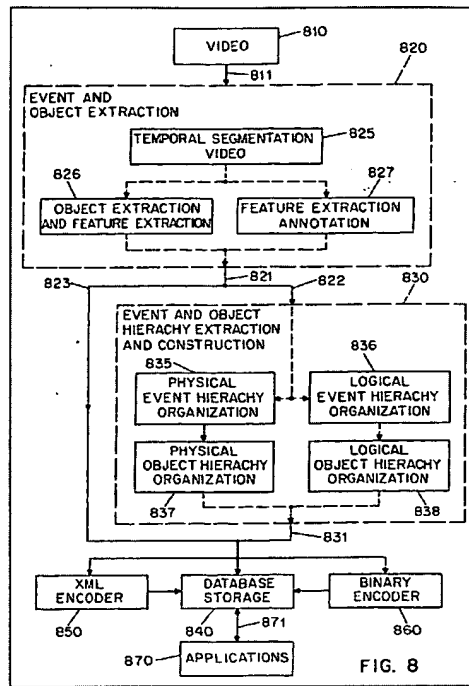reasonable likelihood of prevailing with respect to this proposed obviousness rejection

of **claim 8** because the teaching of **Olson**, as presented in the request and claim

charts, teaches away from the claimed invention.

Issue (Q)

Requester proposed that **claim 8** is obvious over the combination of **Paek, Qian,**

Courtney-EP, and **Brill**. For the proposed rejection of **claim 8**, Requester provides a

detailed application of the combination of **Paek, Qian, Courtney-EP**, and **Brill** to **claim**
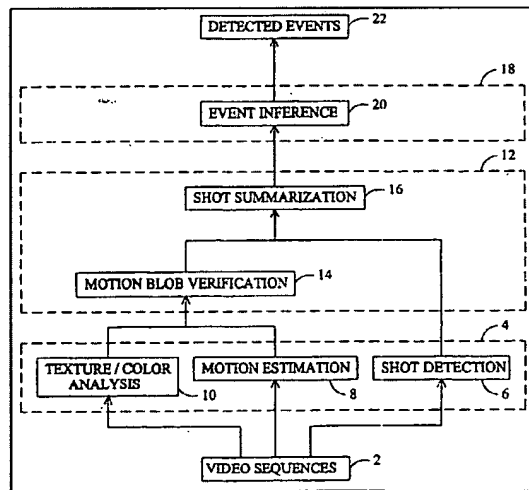
8 in the request (*pgs. 87-88*) and the claim charts. (*pgs. 3110-3157*)

As to the limitation of "*after detecting the plurality of attributes, identifying an*

event that is not one of the detected attributes of the first and second objects by

applying the new user rule to the plurality of detected attributes", requester cites **Paek**

as disclosing this limitation and **Qian, Courtney-EP, and Brill** as teaching this

limitation. (*claim charts pgs. 3136-3144*) Since requester is citing **Paek, Qian, Courtney-**

EP, and **Brill** for this single limitation, the examiner considers the combination of **Paek,**

Qian, Courtney-EP, and **Brill**, as presented in the request and claim charts, is required

to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col. 17:26-61 and figure 8*. For

the reader's convenience **Paek's** *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at _col.2:55 to col.3:8 and figure 1_.

For the reader's convenience, _figure 1_ of **Qian** is reproduced below.

Requester cites **Courtney-EP** ¶¶_[0069] to [0071], [0090] and figure 9_ as teaching

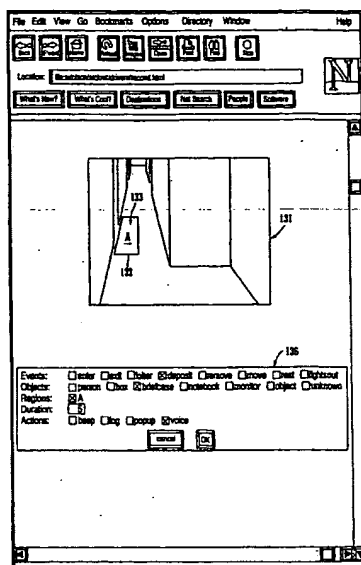this limitation. For the reader's convenience, _figure 9_ of **Courtney-EP** is reproduced

below.

FIG. 9

Requester cites **Brill** *col.4:27-36, col.4:61 to col.5:28, fig. 3, col.6:8-30, col.7:45-54,*

col.8:36-58, and figure 3 as teaching this limitation. For the reader's convenience, *figure 3*

of **Brill** is reproduced below.

First, **Paek**'s *event and object hierarchy extraction and construction #830* identifies the

event by the detected attributes *of object extraction and feature extraction #826*.

Consequently, **Paek** does not disclose the claimed 'identifying an event that is <u>not</u> one

of the detected attributes'.

Second, **Qian** discloses *detected events #22* that are a result of *texture/color analysis*

#10, *motion estimation #8*, and *shot detection #6*. As such, **Qian** does not suggest the

claimed 'identifying an event that is <u>not</u> one of the detected attributes'.

Third, **Courtney-EP** discloses *events* such as enter exit, loiter, deposit, rest, and

lights out of *objects* such as person, box, briefcase, notebook, monitor, object, and

unknown but does not disclose or suggest the claimed attributes. As such, **Courtney-**

EP does not disclose or suggest identifying an event that is not one of the detected

attributes, as is claimed.

Fourth, **Brill** discloses detecting a series *of simple events #302*, such as REMOVE

and EXIT, to detect a *complex event #309*, such as THEFT. (*see fig. 3 and col.4:30-35*) As

such, Brill discloses the complex event is detected as a function of detected simple

events REMOVE and EXIT. Therefore, **Brill** does not disclose or suggest identifying an

event that is not one of the detected attributes, as claimed.

For the reasons set forth above, the combination of **Paek**, **Qian**, **Courtney-EP**,

and **Brill**, as presented in the request and the claim charts, do not disclose or make

obvious "*after detecting the plurality of attributes, identifying an event that is not one of*

the detected attributes of the first and second objects by applying the new user rule to

the plurality of detected attributes" in combination with the other features of the claims.

Consequently, requester has <u>not</u> shown a reasonable likelihood of prevailing with

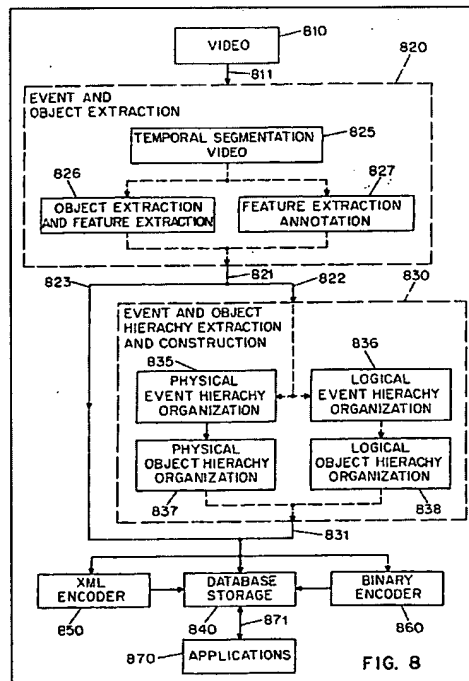respect to this proposed obviousness rejection.

Issue (R)

Requester proposed that <u>**claim 8**</u> is obvious over the combination of **Paek, Qian,**

Courtney-NPL, and **Brill**. For the proposed rejection of <u>**claim 8**</u>, Requester provides a

detailed application of the combination of **Paek, Qian, Courtney-NPL**, and **Brill** to

<u>**claim 8**</u> in the request (*pgs. 85-86*) and the claim charts. (*pgs. 2694-2733*)

As to the limitation of "*after detecting the plurality of attributes, identifying an*

event that is not one of the detected attributes of the first and second objects by

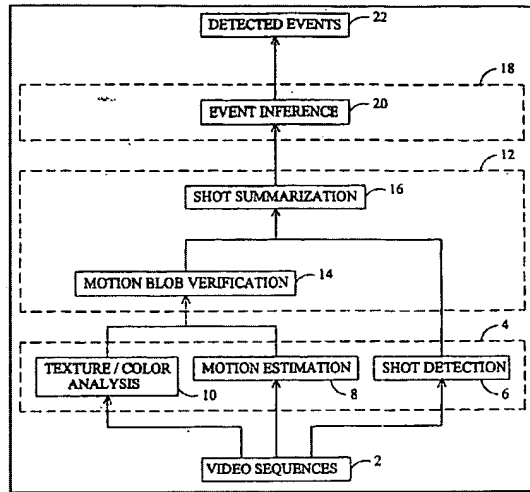*applying the new user rule to the plurality of detected attributes*", requester cites **Paek**

as disclosing this limitation and **Qian, Courtney-NPL, and Brill** as teaching this

limitation. (*claim charts pgs. 2713-2721*) Since requester is citing **Paek**, **Qian**, **Courtney-**

NPL, and **Brill** for this single limitation, the examiner considers the combination of

Paek, **Qian**, **Courtney-NPL**, and **Brill**, as presented in the request and claim charts, is

required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col.17:26-61 and figure 8*. For

the reader's convenience **Paek's** *figure 8* is reproduced below.
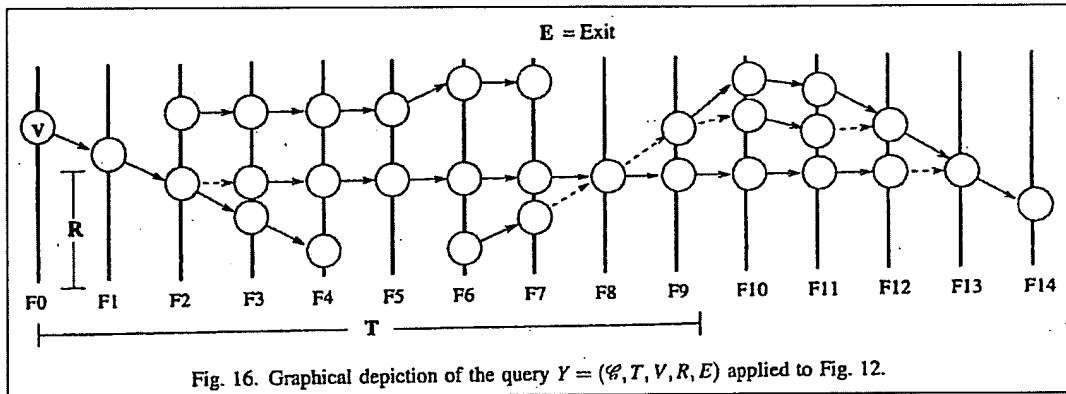

FIG. 8

Requester cites **Qian** as teaching this limitation at *col.2:55 to col.3:8 and figure 1*.

For the reader's convenience, *figure 1* of **Qian** is reproduced below.

Requester cites **Courtney-NPL** _pg. 618, cols. 1-2_ as teaching this limitation. For

the reader's convenience, _figure 16_ of **Courtney-NPL** is reproduced below.

Fig. 16. Graphical depiction of the query $Y = (\mathscr{C}, T, V, R, E)$ applied to Fig. 12.

Requester cites **Brill** _col.4:27-36, col.4:61 to col.5:28, fig. 3, col.6:8-30, col.7:45-54,_

col.8:36-58, and figure 3 as teaching this limitation. For the reader's convenience, _figure 3_
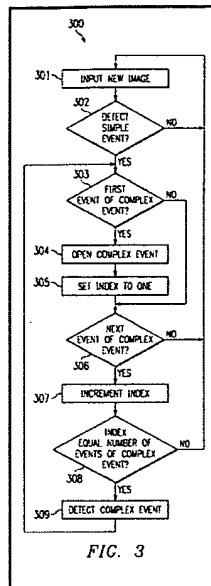
of **Brill** is reproduced below.

FIG. 3

First, **Paek**'s *event and object hierarchy extraction and construction #830* identifies the

event by the detected attributes *of object extraction and feature extraction #826*.

Consequently, **Paek** does not disclose the claimed 'identifying an event that is <u>not</u> one

of the detected attributes'.

Second, **Qian** discloses *detected events #22* that are a result of *texture/color analysis*

#10, *motion estimation #8*, and *shot detection #6*. As such, **Qian** does not suggest the

claimed 'identifying an event that is <u>not</u> one of the detected attributes'.

Third, **Courtney-NPL**'s query Y=(6, T, V, R, E), where 6 is the video clip, T

specifies a time interval in the clip, V is a V-object within the clip, R a spatial region in

the field of view, and E an object-motion event. (*pg. 618, col.1, 3rd ¶*) The query engine

processes Y by finding all the video subsequences in 6 that satisfy T, V, R, and E. (*pg.*

618, col.1, 2nd ¶) As such, **Courtney-NPL** does not disclose or suggest identifying an

event, such as the disclosed 'find any occurrence of this object being removed from this

region of the scene between 8am and 9am' that is not one of the detected attributes, as claimed, because the event is determined as a function of T, V, R, and E.

Fourth, **Brill** discloses detecting a series *of simple events #302*, such as REMOVE and EXIT, to detect a *complex event #309*, such as THEFT. (*see fig. 3 and col.4:30-35*) As such, Brill discloses the complex event is detected as a function of detected simple events REMOVE and EXIT. Therefore, **Brill** does not disclose or suggest identifying an event that is not one of the detected attributes, as claimed.

For the reasons set forth above, the combination of **Paek**, **Qian**, **Courtney-NPL**, and **Brill**, as presented in the request and the claim charts, do not disclose or make obvious *"after detecting the plurality of attributes, identifying an event that is not one of the detected attributes of the first and second objects by applying the new user rule to the plurality of detected attributes"* in combination with the other features of the claims. Consequently, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection.
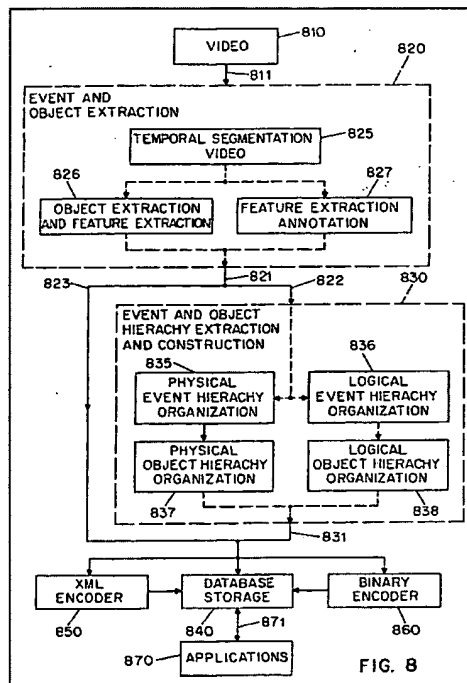
Issue (S)

Requester proposed that **<u>claim 8</u>** are obvious over the combination of **Paek**, **Qian**, **Courtney-NPL**, and **Olson**. The request and claim charts allege that **Paek** discloses limitations of **<u>claim 8</u>** and **Qian**, **Courtney-NPL**, and **Olson** teaches limitations of **<u>claim 8</u>**. (*request pgs. 88-89 and claim charts pgs. 3587-3621*)

As to the limitation of *"detecting first and second objects in a video from a single camera"*, Requester cites **Paek** as disclosing this limitation and **Qian**, **Courtney-NPL**, and **Olson** as teaching this limitation. (*claim charts pgs. 3587-3590*) Since requester is
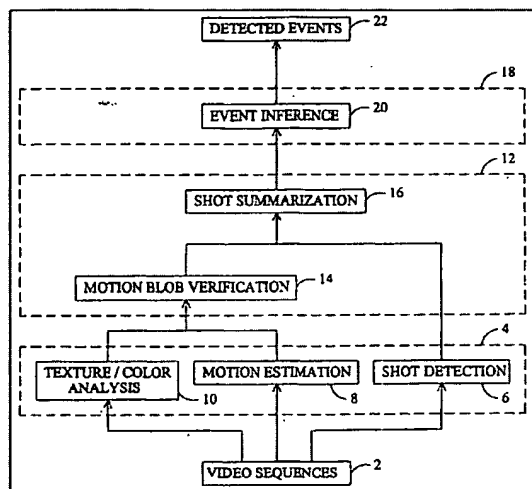
citing **Paek**, **Courtney-NPL**, and **Olson** for this single limitation, the examiner considers

the combination of **Paek**, **Courtney-NPL**, and **Olson**, as presented in the request and

claim charts, is required to meet the limitation of "*detecting first and second objects in a*

video from a single camera".

Requester cites **Paek** as disclosing this limitation at *col.17:26-61 and figure 8*. For

the reader's convenience **Paek's** *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at *col.2:55 to col.3:8 and figure 1*.

For the reader's convenience, *figure 1* of **Qian** is reproduced below.

Requester cites **Courtney-NPL** as disclosing this limitation in *pg. 616, col.2, figure 13, pg. 608, col.2, figure 1, pg. 609, cols. 1 and 2, and figure 13*. For the reader's convenience, *figure 13* of **Courtney-NPL** is reproduced below.
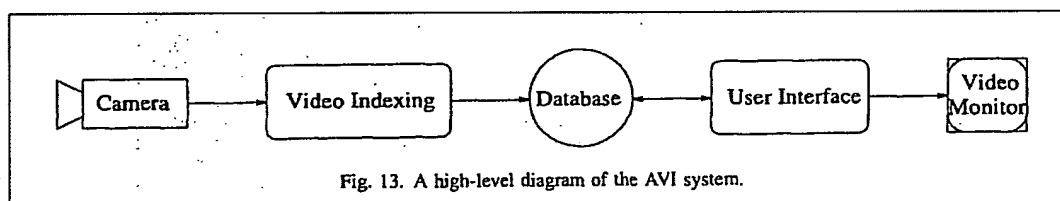

Fig. 13. A high-level diagram of the AVI system.

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

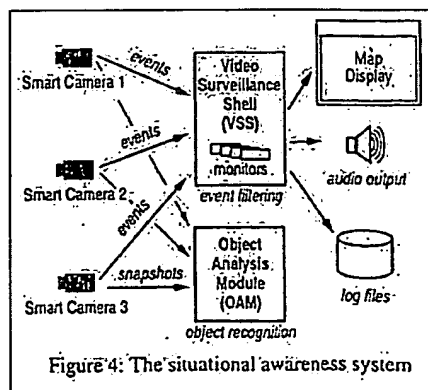For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection over of **Paek**, **Qian**, **Courtney-NPL** and **Olson** has a reasonable likelihood of prevailing because the general application of the combination of **Paek**, **Qian**, **Courtney-NPL**, and **Olson** to **<u>claim 8</u>** in the request and claim charts teaches away from the limitation of "*detecting first and second objects in a video from a single camera*" because the combination of **Paek, Qian,** and **Courtney-NPL** is ultimately being modified by the <u>multiple</u> smart cameras of **Olson**'s *figure 4* thereby resulting in a system/method that detects objects in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of **<u>claim 8</u>** because the teaching of **Olson**, as presented in the request and claim charts, teaches away from the claimed invention.

CLAIMS 9-19

For the reasons set forth below, the following issues have been determined to have a reasonable likelihood of prevailing for the identified claims, and will be addressed in the non-final action.

Issue (A):   **Claims 9-13 and 15-19** anticipated by **Courtney-US**.

Issue (B):   **Claim 14** obvious over **Courtney-US**.

Issue (D):   **Claims 9-13 and 15-19** are anticipated by **Shotton**.

Issue (E):   **Claim 14** obvious over **Shotton**.

Issue (I):   **Claims 9-19** obvious over **Courtney-EP** and **Brill**.

For the reasons set forth below, the following issues have been determined to NOT have a reasonable likelihood of prevailing for the identified claims, and will NOT be addressed in the non-final action.

Issue (G):   **Claims 9-19** obvious over **Courtney-EP** and **Olson**.

Issue (H):   **Claims 9-19** obvious over **Courtney-NPL** and **Olson**.

Issue (J):   **Claims 9-19** obvious over the **Courtney-NPL** and **Brill**.

Issue (K):   **Claims 9-19** obvious over **Winter, Lipton**, and **Brill**.

Issue (L):   **Claims 9-19** obvious over **Paek, Qian**, and **Courtney-US**.

Issue (N):   **Claims 9-19** obvious over **Paek, Qian**, and **Shotton**.

Issue (P):   **Claims 9-19** obvious over **Paek, Qian, Courtney-EP**, and **Olson**.

Issue (Q):   **Claims 9-19** obvious over **Paek, Qian, Courtney-EP**, and **Brill**.

Issue (R):   **Claims 9-19** obvious over **Paek, Qian, Courtney-NPL**, and **Brill**.

Issue (S):   **Claims 9-19** obvious over **Paek, Qian, Courtney-NPL**, and **Olson**.

Issue (A)

Requester proposed that **claims 9-13 and 15-19** are anticipated by **Courtney-US**. The examiner agrees that this anticipation rejection over **Courtney-US** has a reasonable likelihood of prevailing because the general application of **Courtney-US** to **claims 9-13 and 15-19** in the claim charts appears reasonable. (*request pgs. 28-32 and claim charts pgs. 16-36*) Therefore, requester has shown a reasonable likelihood of prevailing with respect to this proposed anticipation rejection of **claims 9-13 and 15-19**.

Issue (B)

Requester proposed that **claim 14** is obvious over **Courtney-US**. The examiner agrees that this obviousness rejection over **Courtney-US** has a reasonable likelihood of prevailing because the general application of **Courtney-US** to **claim 14** in the claim charts appears reasonable. (*request pgs. 32-33 and claim charts pg. 56*) Further, the examiner is able to discern that **Courtney-US** is modified for the imitations of **claim 14** that are not present in **claims 1-7, 9-13, and 15-28**, for which an anticipation rejection over **Courtney-US** has a reasonable likelihood of prevailing. Therefore, requester has shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of **claim 14**.

Issue (D)

Requester proposed that **claims 9-13 and 15-19** are anticipated by **Shotton**. The examiner agrees that this anticipation rejection over **Shotton** has a reasonable likelihood of prevailing because the general application of **Shotton** to **claims 9-13 and 15-19** in the request (*pgs. 38-42*) and claim charts appears reasonable. (*claim charts pgs.*

117-133) Therefore, requester has shown a reasonable likelihood of prevailing with respect to this proposed anticipation rejection of **claims 9-13 and 15-19**.
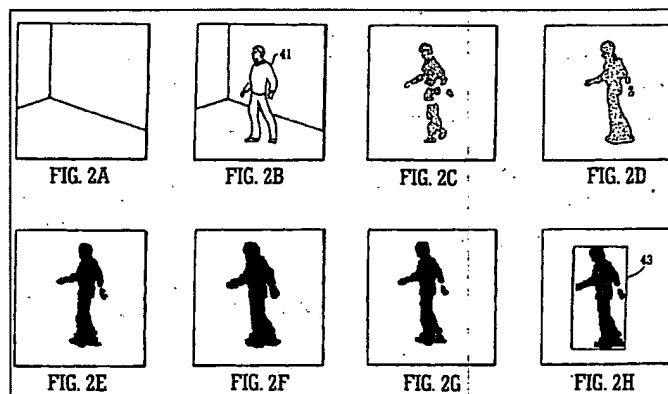
Issue (E)

Requester proposed that **claim 14** is obvious over **Shotton**. The examiner agrees that this obviousness rejection over **Shotton** has a reasonable likelihood of prevailing because the general application of **Shotton** as to **claim 14** in the request (*pgs. 42-43*) claim charts appears reasonable. (*pg. 158*) Therefore, requester has shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of **claim 14**.
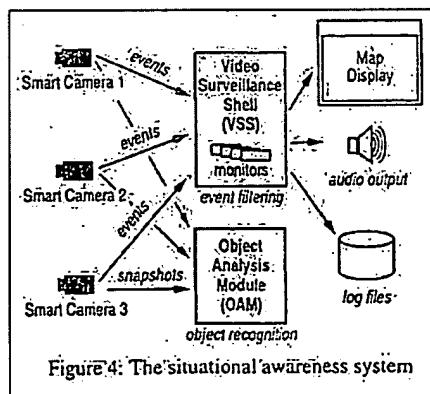
Issue (G)

Requester proposed that **claims 9-19** are obvious over the combination of **Courtney-EP** and **Olson**. The request and claim charts allege that **Courtney-EP** discloses limitations of **claims 9-19** and **Olson** teaches limitations of **claims 9-19**. (*request pgs. 51-57 and claim charts pgs. 317-373*)

As to the limitation of "*means for detecting an object in a video from a single camera*", requester cites **Courtney-EP** as disclosing this limitation and **Olson** as teaching this limitation. (*claim charts pgs. 317-322*) Since requester is citing **Courtney-EP** and **Olson** for this single limitation, the examiner considers the combination of **Courtney-EP** and **Olson**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Courtney-EP** as disclosing this limitation in ¶¶*[0002], [0017],*

[0028] to [0034], and figure 2. For the reader's convenience, *figure 2* of **Courtney-EP** is

reproduced below.

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

For the reader's convenience, *figure 4* of **Olson** is reproduced below.

The examiner does <u>not</u> agree that this obviousness rejection over **Courtney-EP**

and **Olson** has a reasonable likelihood of prevailing because the general application of

the combination of **Courtney-EP** and **Olson** to <u>**claims 9-19**</u>, as presented in the

request and claim charts, teaches away from the limitation of *"means for detecting an*

object in a video from a single camera" because **Courtney-EP** is being modified by the

multiple smart cameras of **Olson**'s *figure 4* thereby resulting in a system/method for

detecting an object in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera.

For at least this reason, requester has <u>not</u> shown a reasonable likelihood of prevailing

with respect to this proposed obviousness rejection of **claims 9-19** because the

teaching of **Olson**, as presented in the request and claim charts, teaches away from the

claimed invention.

Issue (H)

Requester proposed that **claim 9-19** is obvious over the combination of

Courtney-NPL and **Olson**. The request and claim charts allege that **Courtney-NPL**

discloses limitations of **claim 9-19** and **Olson** teaches limitations of **claim 9-19**. (*request*

pgs. 63-64 and claim charts pgs. 1163-1201)

As to the limitation of "*means for detecting an object in a video from a single*

camera", requester cites **Courtney-NPL** as disclosing this limitation and **Olson** as

teaching this limitation. (*claim charts pgs. 1163-1165*) Since requester is citing **Courtney-**

NPL and **Olson** for this single limitation, the examiner considers the combination of

Courtney-NPL and **Olson**, as presented in the request and claim charts, is required to

meet this limitation.

Requester cites **Courtney-NPL** as disclosing this limitation in *pg. 616, col.2, figure*

13, pg. 608, col.2, figures 1-2, pg. 609, cols. 1 and 2, and figure 13. For the reader's

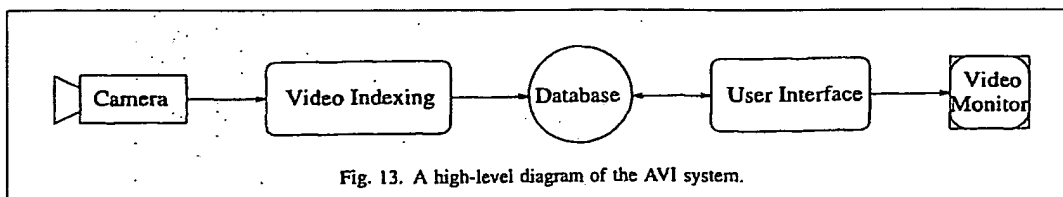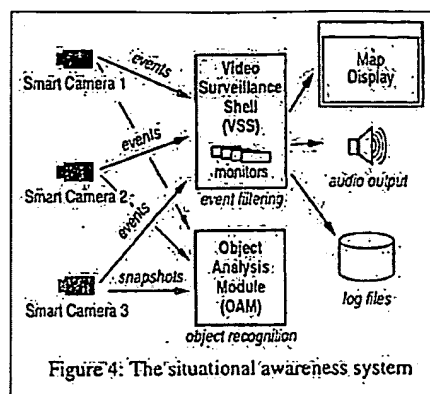convenience, *figure 13* of **Courtney-NPL** is reproduced below.

Fig. 13. A high-level diagram of the AVI system.

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection over **Courtney-NPL**

and **Olson** has a reasonable likelihood of prevailing because the general application of

the combination of **Courtney-NPL** and **Olson** to <u>claim 9-19</u>, as presented in the

request and claim charts, teaches away from the limitation of "*means for detecting an*

object in a video from a single camera" because **Courtney-NPL**'s <u>camera</u> is being

modified by the multiple smart cameras of **Olson**'s *figure 4* thereby resulting in a

system/method for detecting an object in videos from <u>multiple</u> cameras and not the

claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable

likelihood of prevailing with respect to this proposed obviousness rejection of <u>**claim 9-19**</u>

because the teaching of **Olson**, as presented in the request and claim charts, teaches

away from the claimed invention.

Issue (I)

Requester proposed that <u>**claims 9-19**</u> are obvious over **Courtney-EP** and **Brill**.

The examiner agrees that this obviousness rejection over **Courtney-EP** and **Brill** has a

reasonable likelihood of prevailing because the general application of **Courtney-EP** to

claims 9-19 in the claim charts appears reasonable. (*request pgs. 62-63 and claim charts*

pgs. 876-935) Also, the examiner is able to discern that this disclosure of **Courtney-EP**

combined with **Brill** is reasonably likely to prevail because *figure 1* of **Courtney-EP** and

Brill disclose identical systems for which the methods employed by the respective

systems are likely to be obvious over one another. Therefore, requester has shown a

reasonable likelihood of prevailing with respect to this proposed obviousness rejection

of **claims 9-19**.

Issue (J)

Requester proposed that **claims 9-19** are obvious over **Courtney-NPL** and **Brill**.

The request and claim charts allege that **Courtney-NPL** discloses limitations of **claims**

9-19 and **Brill** teaches limitations of **claims 9-19**. (*request pgs. 57-62 and claim charts pgs.*

615-663)

Requester cites both **Courtney-NPL** and **Brill** for the single limitation of *"means*

for identifying the event independent of when the attributes are stored in memory" (*claim*

charts pgs. 631-634) Since requester is citing both **Courtney-NPL** and **Brill** for this single

limitation, the examiner considers the combination of **Courtney-NPL** and **Brill**, as

presented in the request and claim charts, is required to meet this limitation.

Requester cites **Courtney-NPL** *pg. 610: col.1, pg. 612:cols.1-2, pg. 614:col.2 to pg.*

615:cols.1-2, and figure 5 as disclosing this limitation and requester cites **Brill** *col.1:43-48,*

col.3:24-27, col.3:41-49, col.4:27-30 as teaching this claim limitation.

However, the motion segmentation, object tracking, hypothetical sequence of 1-D frames, motion analysis stage, V-object indexing, depositor, and remover as disclosed by **Courtney-NPL** and modified by **Brill**'s teaching of a "surveillance system programmed to generate an alarm upon occurrence of a complex event made up of a series of simple events" does not disclose or suggest that these stages of **Courtney-NPL** are independent of the identified complex event made up of simple events. For at least this reason, the examiner does <u>not</u> agree that this obviousness rejection over **Courtney-NPL** and **Brill** has a reasonable likelihood of prevailing.

Issue (K)

Requester proposed that **claims 9-19** are obvious over the combination of **Winter, Lipton,** and **Brill**. For the proposed rejection of **claims 9-19**, Requester provides a detailed application of the combination of **Winter**, **Lipton**, and **Brill** to **claims 9-19** in the request (*pgs. 65-73*) and the claim charts. (*pgs. 1384-1438*)

Requester cites **Winter** and **Brill** for the single limitation of "*means for identifying the event independent of when the attributes are stored in memory*". (*claim charts pgs. 1404-1405*) Since requester is citing **Winter** and **Brill** for this single limitation, the examiner considers the combination of **Winter** and **Brill**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Winter** *col. 3:23-32 and col. 73:56-64* as disclosing this limitation. For the reader's convenience, these portions of **Winter** are reproduced below.

> According to still a further aspect of the invention, there is provided apparatus for analyzing video data, including a source of video data and a device for analyzing the video data provided by the source of video data to detect a first predetermined characteristic of the video data by performing a first predetermined analysis algorithm, and for performing a second predetermined analysis algorithm to detect a second predetermined characteristic of the video data when the analysis device detects the first predetermined characteristic.

> different characteristics of an incoming video stream. It is determined at step 2348 whether a first characteristic is present in an incoming stream of video images, by application of a first image analysis algorithm. If at step 2348 it is determined that the predetermined characteristic has been detected by the first analysis algorithm, then step 2350 follows, at which it is determined whether a second predetermined characteristic has been detected in the same incoming video stream using a second analysis algorithm. If so,

Requester cites **Brill** *col.1:43-48, col.3:24-27, col.3:41-49, and col.4:27-30* as teaching this limitation. For the reader's convenience, these portions of **Brill** are reproduced below.

> Given a system which detects simple events, one can easily create a user interface that enables someone to define a complex event by constructing a list of sub-events. After one or more complex events have been defined, the sub-events of complex events defined later can be complex events themselves. As an alternative user interface, complex

> The basic system performs three data processing steps for every image of a video sequence to recognize events. The three steps are detecting objects, tracking objects, and analyzing the motion graph.

> Finally, to recognize events, the system analyzes the motion graph. The preferred, embodiment of the system recognizes the following vocabulary of events: ENTER, EXIT, REST, MOVE, DEPOSIT, REMOVE, LIGHTS-ON and LIGHTS-OUT. These events are examples of the most common in an office environment where the main interaction is between people and smaller stationary objects. Other examples would be applicable to monitoring outdoors, such as a parking lot.

> In the present invention the surveillance system can be programmed to only generate an alarm upon the occurrence of a complex event made up of a series of simple events. Returning to the THEFT example, a better system would

As evidenced by the above disclosures, the combination of **Winter** and **Brill** does not teach or make obvious "*means for identifying the event independent of when the attributes are stored in memory*" because the three data processing steps of **Brill**'s basic system for processing images of a video sequence to recognize events are not disclosed as independent of ENTER, EXIT, REST, MOVE, DEPOSIT, REMOVE, LIGHTS-ON, and LIGHT—OUT. As such, for at least this reason, Requester has not shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection.

Issue (L)

Requester proposed that **claims 9-19** are obvious over the combination of **Paek, Qian,** and **Courtney-US**. For the proposed rejection of **claims 9-19**, requester provides a detailed application of the combination of **Paek, Qian,** and **Courtney-US** to **claims 9-19** in the request (*pgs. 73-79*) and the claim charts. (*pgs. 1626-1676*)

Requester cites **Paek, Qian,** and **Courtney-US** for the single limitation of "*means for selecting a new user rule after the plurality of detected attributes are stored in memory*". (*claim charts pgs. 1633-1634*) Since requester is citing **Paek, Qian,** and **Courtney-US** for this single limitation, the examiner considers the combination of **Paek, Qian,** and **Courtney-US**, as presented in the request and claim charts, is required to meet this limitation.
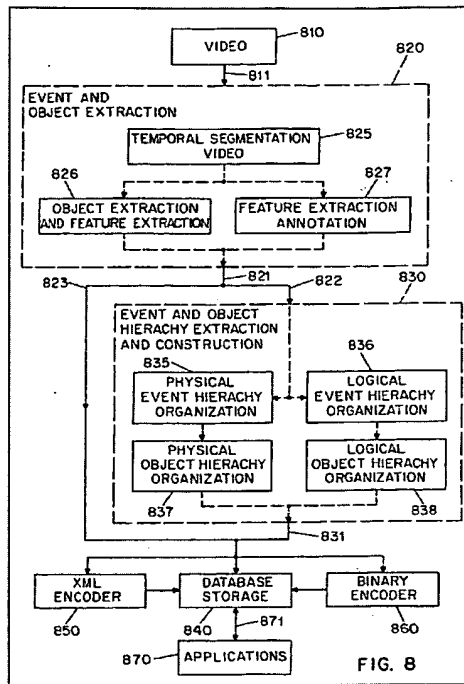
Requester cites **Paek** _col. 18:20-28 and col. 73:56-64_ as disclosing this limitation.

Requester cites **Courtney-US** _col. 4:45-52, fig. 4, and col. 5:4-14_ as teaching this limitation.

First, **Paek's** video object hierarchy descriptions do not disclose or make obvious

"means for selecting a new user rule after the plurality of detected attributes are stored

in memory" because selection of a rule, new or otherwise, is not discussed at all in this

citation of **Paek**. Further, **Courtney-US**'s disclosure of "show me all objects that are

removed from this region of the scene" is not a 'new user rule' as claimed. As such, for

at least this reason, Requester has not shown a reasonable likelihood of prevailing with

respect to this proposed obviousness rejection of **claims 9-19**.

Issue (N)

Requester proposed that **claims 9-19** are obvious over the combination of **Paek**,

Qian, and **Shotton**. For the proposed rejection of **claims 9-19**, Requester provides a

detailed application of the combination of **Paek**, **Qian**, and **Shotton** to **claims 9-19** in

the request (_pgs. 81-82_) and the claim charts. (_pgs. 1878-1930_)

As to the limitation of "_means for detecting an object in a video from a single_

camera", Requester cites **Paek** as disclosing this limitation and **Shotton** as teaching

this limitation. (_pgs. 1878-1880_) Since requester is citing **Paek** and **Shotton** for this single

limitation, the examiner considers the combination of **Paek** and **Shotton**, as presented

in the request and claim charts, is required to meet this limitation.

Requester cites **Paek** _col. 17:26-61 and figure 8_ as meeting this limitation. For the

reader's convenience **Paek's** _figure 8_ is reproduced below.

FIG. 8

Requester cites **Shotton** *§§2, 2.3, and figure 3* as teaching this limitation. For the

reader's convenience, *figure 1* of **Shotton**, which is described in *§2* and models how the

specific intrinsic metadata data of the video content is stored, is reproduced below.
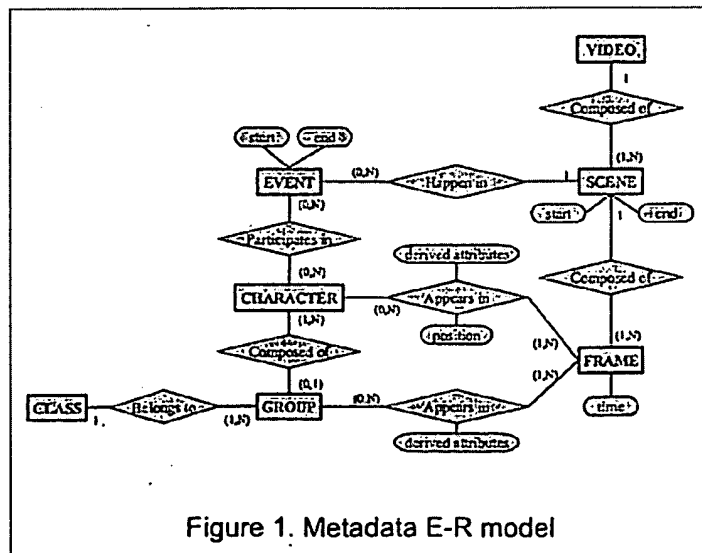

Figure 1. Metadata E-R model

This portion of **Shotton**, however, is silent as to the number of cameras and

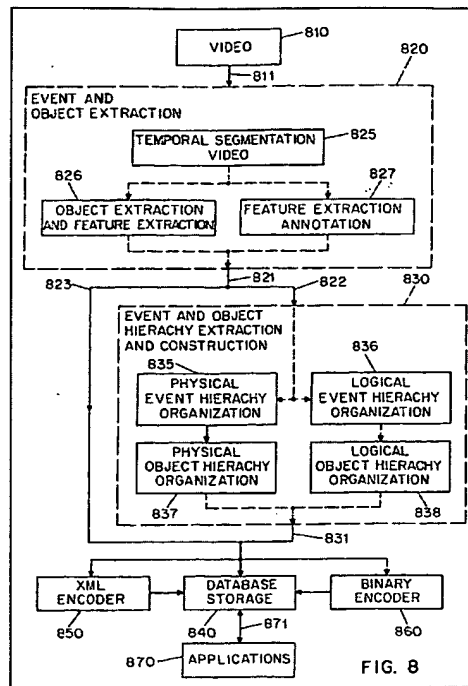**Paek's** *video #810* is not disclosed as a single camera but rather is disclosed merely as

video data (_col.17:26-61_). As such, the examiner does not agree that this obviousness

rejection over **Paek, Qian,** and **Shotton** has a reasonable likelihood of prevailing

because the general application of the combination of **Paek, Qian,** and **Shotton** to

claims 9-19, as presented in the request and claim charts, does not disclose or make

obvious "_means for detecting an object in a video from a single camera_" in combination

with the other limitations of the claims.

Issue (P)

Requester proposed that **claims 9-19** are obvious over the combination of **Paek,**

Qian, Courtney-EP, and **Olson**. The request and claim charts allege that **Paek**

discloses limitations of **claims 9-19** and **Qian, Courtney-EP,** and **Olson** teaches

limitations of **claims 9-19**. (_request pgs. 84-85 and claim charts pgs. 2260-2350_)
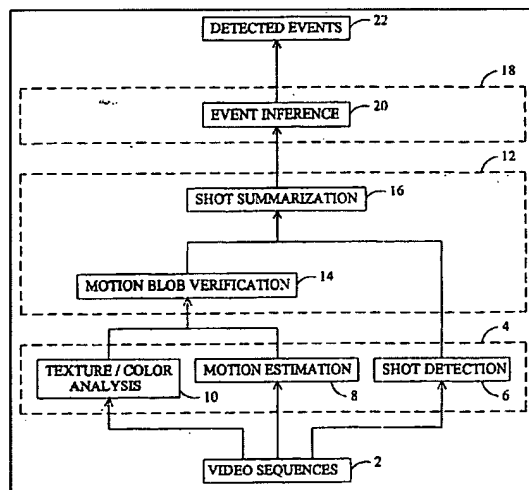
As to the limitation _"means for detecting an object in a video from a single_

camera", requester cites **Paek** as disclosing this limitation and **Qian, Courtney-EP,** and

Olson as teaching this limitation. (_claim charts pgs. 2260-2268_) Since requester is citing

Paek, Qian, Courtney-EP, and **Olson** for this single limitation, the examiner considers

the combination of **Paek, Qian, Courtney-EP,** and **Olson**, as presented in the request

and claim charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at _col.17:26-61 and figure 8_. For

the reader's convenience **Paek's** _figure 8_ is reproduced below.
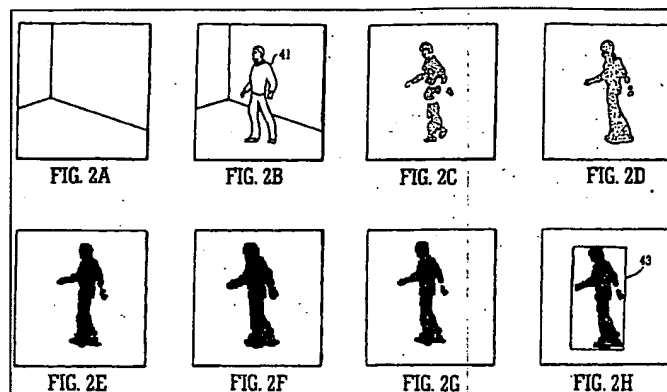
FIG. 8

Requester cites **Qian** as teaching this limitation at _col.2:55 to col.3:8 and figure 1_.

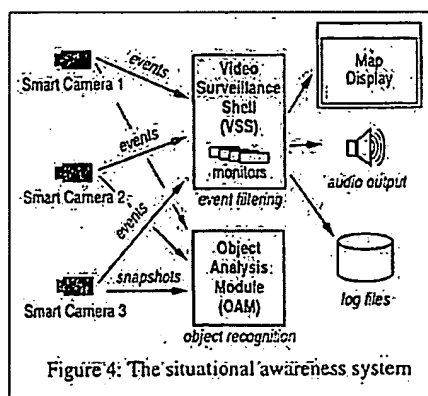For the reader's convenience, _figure 1_ of **Qian** is reproduced below.

Requester cites **Courtney-EP** as disclosing this limitation in ¶¶_[0002], [0017],_

[0028] to [0034, and figure 2. For the reader's convenience, _figure 2_ of **Courtney-EP** is

reproduced below.

FIG. 2A   FIG. 2B   FIG. 2C   FIG. 2D

FIG. 2E   FIG. 2F   FIG. 2G   FIG. 2H

Requester cites **Olson** as teaching this limitation at _pg. 166, col. 1 and figure 4_.

For the reader's convenience, _figure 4_ of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection over **Courtney-NPL**

and **Olson** has a reasonable likelihood of prevailing because the general application of

the combination of **Paek**, **Qian**, **Courtney-EP**, and **Olson** to <u>**claims 9-19**</u> in the request

and claim charts teaches away from the limitation "_means for detecting an object in a_

video from a single camera" because the combination of **Paek**, **Qian,** and **Courtney-EP**

is being modified by the <u>multiple</u> smart cameras of **Olson**'s _figure 4_ thereby resulting in

a system/method for detecting an object in videos from <u>multiple</u> cameras and not the

claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable

likelihood of prevailing with respect to this proposed obviousness rejection of <u>**claims 9-**</u>

19 because the teaching of **Olson**, as presented in the request and claim charts,

teaches away from the claimed invention.

Issue (Q)

Requester proposed that **claims 9-19** are obvious over the combination of **Paek,**

Qian, Courtney-EP, and **Brill**. For the proposed rejection of **claims 9-19**, Requester

provides a detailed application of the combination of **Paek, Qian, Courtney-EP**, and

Brill to **claims 9-19** in the request (*pgs. 87-88*) and the claim charts. (*pgs. 3158-3252*)

As to the limitation of *"means for selecting a new user rule after the plurality of*

detected attributes are stored in memory", Requester cites **Paek** as disclosing this

limitation and **Courtney-EP,** and **Brill** as teaching this limitation. (*claim charts pgs. 3183-*

3187) Since requester is citing **Paek, Courtney-EP**, and **Brill** for this single limitation,

the examiner considers the combination of **Paek, Courtney-EP**, and **Brill**, as presented

in the request and claim charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col. 18:20-28*. Requester cites

Courtney-EP as disclosing this limitation at *[0069] to [0071] and figure 9*. Requester

cites **Brill** as disclosing this limitation at *col. 10:59 to col. 11:25, fig. 7, col. 4:27-36*.

First, **Paek's** video object hierarchy descriptions do not disclose or make obvious

this limitation because selection of a rule, new or otherwise, is not discussed in this

citation of **Paek**. Further, in the context of Requester's proposed rejection, **Courtney-**

EP's *event selection box #136* does not make obvious the claimed 'new user rule' because

Courtney-EP's disclosed events, such as LOITERING, is selected *prior* to detecting the

claimed plurality of attributes, not *after* detecting the claimed plurality of attributes. In

addition, **Brill**'s definition of simple and/or complex events does not make obvious this limitation because, as presented in the claim charts, there is no suggestion of selecting a new user rule in response to the detection of one of the complex events, such as *THEFT EVENT*, made up of a series of simple events such as the *REMOVE EVENT* followed by the *EXIT EVENT*. As such, for at least these reasons, Requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of **claims 9-19**.

Issue (R)

Requester proposed that **claims 9-19** are obvious over the combination of **Paek, Qian, Courtney-NPL**, and **Brill**. For the proposed rejection of **claims 9-19**, Requester provides a detailed application of the combination of **Paek, Qian, Courtney-NPL**, and **Brill** to **claims 9-19** in the request (*pgs. 85-86*) and the claim charts. (*pgs. 2734-2812*)

As to the limitation of "*means for selecting a new user rule after the plurality of detected attributes are stored in memory*", Requester cites **Paek** as disclosing this limitation and **Courtney-NPL**, and **Brill** as teaching this limitation. (*claim charts pgs. 2749-2754*) Since requester is citing **Paek, Courtney-NPL**, and **Brill** for this single limitation, the examiner considers the combination of **Paek, Courtney-NPL**, and **Brill**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col.18:20-28*. Requester cites **Courtney-NPL** as disclosing this limitation at *pg. 607 cols. 1 to 2, pg. 616 col.1, pg. 617 col.2 to pg. 618 cols. 1 and 2*. Requester cites **Brill** as disclosing this limitation at *col.10:59 to col.11:25, fig. 7, col.4:27-36*.

First, **Paek's** video object hierarchy descriptions do not disclose or make obvious

this limitation because selection of a rule, new or otherwise, is not discussed in this

citation of **Paek**. Further, in the context of Requester's proposed rejection, **Courtney-**

NPL's context based retrieval system by which the automatic video indexing (AVI)

system may specify queries on video sequences does not make obvious the claimed

'new user rule' because **Courtney-NPL's** disclosed queries, such as "show me all

objects that were removed from this region of the scene between 8am and 9am", is

selected *prior* to detecting the claimed plurality of attributes, not *after* detecting the

claimed plurality of attributes. In addition, **Brill's** definition of simple and/or complex

events does not make obvious this limitation because, as presented in the claim charts,

there is no suggestion of selecting a new user rule in response to the detection of one of

the complex events, such as *THEFT EVENT*, made up of a series of simple events such

as the *REMOVE EVENT* followed by the *EXIT EVENT*. As such, for at least these

reasons, Requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to

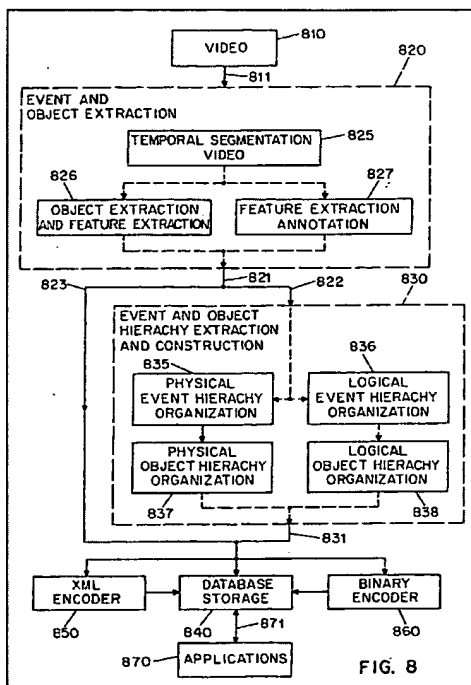this proposed obviousness rejection of **claims 9-19**.

Issue (S)

Requester proposed that **claims 9-19** are obvious over the combination of **Paek**,

Qian, Courtney-NPL, and **Olson**. The request and claim charts allege that **Paek**

discloses limitations of **claims 9-19** and **Qian, Courtney-NPL**, and **Olson** teaches

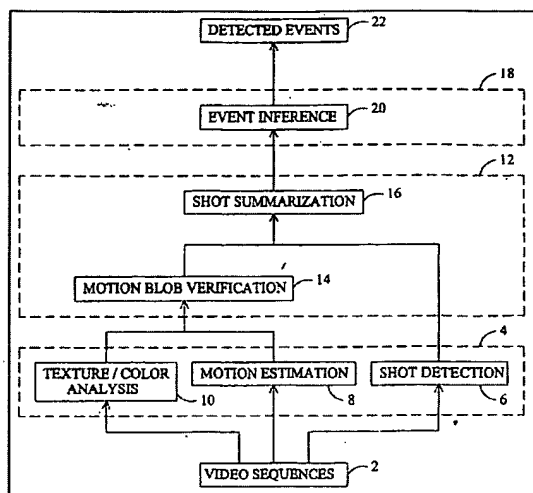limitations of **claims 9-19**. (*request pgs. 88-89 and claim charts pgs. 3622-3692*)

As to the limitation of "*means for detecting an object in a video from a single camera*", Requester cites **Paek** as disclosing this limitation and **Qian, Courtney-NPL, and Olson** as teaching this limitation. (*claim charts pgs. 3622-3625*)

Requester cites **Paek** as disclosing this limitation at *col.17:26-61 and figure 8*. For the reader's convenience **Paek's** *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at *col.2:55 to col.3:8 and figure 1*.

For the reader's convenience, *figure 1* of **Qian** is reproduced below.

Requester cites **Courtney-NPL** as disclosing this limitation in *pg. 616, col.2, figure 13, pg. 608, col.2, figure 1, pg. 609, cols. 1 and 2, and figure 13*. For the reader's convenience, *figure 13* of **Courtney-NPL** is reproduced below.
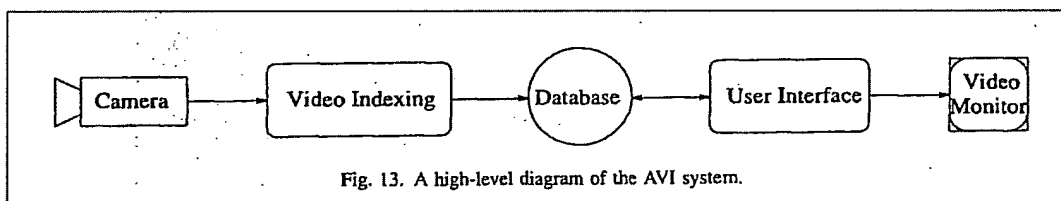

Fig. 13. A high-level diagram of the AVI system.

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

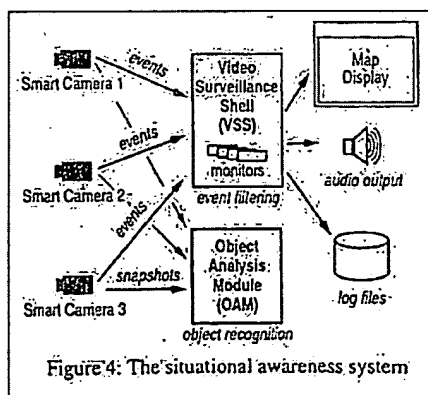For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection has a reasonable likelihood of prevailing because the general application of the combination of **Paek,** **Qian, Courtney-NPL**, and **Olson** to <u>**claims 9-19**</u>, as presented in the request and claim charts, teaches away from the limitation of "*means for detecting an object in a video from a <u>single</u> camera*" because the combination of **Paek, Qian,** and **Courtney-NPL** is being modified by the <u>multiple</u> smart cameras of **Olson**'s *figure 4* thereby resulting in a system/method for detecting an object in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of <u>**claims 9-19**</u> because the teaching of **Olson**, as presented in the request and claim charts, teaches away from the claimed invention.

CLAIMS 20-21

For the reasons set forth below, the following issues have been determined to

have a reasonable likelihood of prevailing for the identified claims, and will be

addressed in the non-final action.

Issue (A):   **Claims 20-21** anticipated by **Courtney-US**.

Issue (D):   **Claims 20-21** anticipated by **Shotton**.

Issue (I):   **Claims 20-21** obvious over **Courtney-EP** and **Brill**.

For the reasons set forth below, the following issues have been determined to

NOT have a reasonable likelihood of prevailing for the identified claims, and will NOT be

addressed in the non-final action.

Issue (G):   **Claims 20-21** obvious over **Courtney-EP** and **Olson**.

Issue (H):   **Claims 20-21** obvious over **Courtney-NPL** and **Olson**.

Issue (J):   **Claims 20-21** obvious over **Courtney-NPL** and **Brill**.

Issue (K):   **Claims 20-21** obvious over **Winter**, **Lipton**, and **Brill**.

Issue (L):   **Claims 20-21** obvious over **Paek**, **Qian,** and **Courtney-US**.

Issue (N):   **Claims 20-21** obvious over **Paek**, **Qian,** and **Shotton**.

Issue (P):   **Claims 20-21** obvious over **Paek**, **Qian, Courtney-EP**, and **Olson**.

Issue (Q):   **Claims 20-21** obvious over **Paek**, **Qian, Courtney-EP**, and **Brill**.

Issue (R):   **Claims 20-21** obvious over **Paek**, **Qian, Courtney-NPL**, and **Brill**.

Issue (S):   **Claims 20-21** obvious over **Paek**, **Qian, Courtney-NPL**, and **Olson**.

Issue (A)

Requester proposed that **claims 20-21** are anticipated by **Courtney-US**. The

examiner agrees that this anticipation rejection over **Courtney-US** has a reasonable

likelihood of prevailing because the general application of **Courtney-US** to <u>**claims 20-21**</u> in the claim charts appears reasonable. (*request pgs. 28-32 and claim charts pgs. 37-44*) Therefore, requester has shown a reasonable likelihood of prevailing with respect to this proposed anticipation rejection of <u>**claims 20-21**</u>.

Issue (D)

Requester proposed that <u>**claims 20-21**</u> are anticipated by **Shotton**. The examiner agrees that this anticipation rejection over **Shotton** has a reasonable likelihood of prevailing because the general application of **Shotton** to <u>**claims 20-21**</u> in the in the request (*pgs. 38-42*) and claim charts 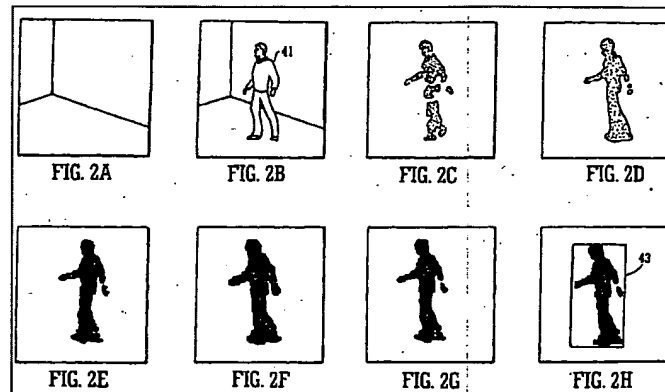appears reasonable. (*pgs. 134-142*) Therefore, requester has shown a reasonable likelihood of prevailing with respect to this proposed anticipation rejection of <u>**claims 20-21**</u>.
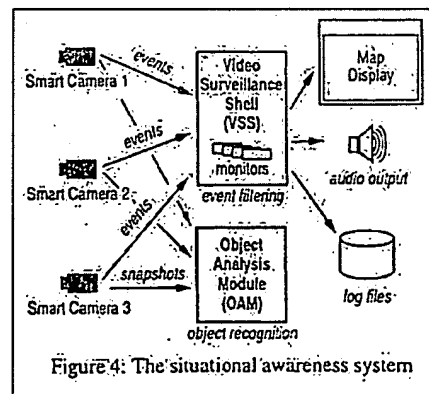
Issue (G)

Requester proposed that <u>**claims 20-21**</u> are obvious over the combination of **Courtney-EP** and **Olson**. The request and claim charts allege that **Courtney-EP** discloses limitations of <u>**claims 20-21**</u> and **Olson** teaches limitations of <u>**claims 20-21**</u>. (*request pgs. 51-57 and claim charts pgs. 374-405*)

As to the limitation of *"providing a video device which detects an object upon analyzing a video from a single camera"*, requester cites **Courtney-EP** as disclosing this limitation and **Olson** as teaching this limitation. (*claim charts pgs. 374-379*) Since requester is citing **Courtney-EP** and **Olson** for this single limitation, the examiner considers the combination of **Courtney-EP** and **Olson**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Courtney-EP** as disclosing this limitation in ¶¶*[0002], [0017],*

[0028] to [0034], and figure 2. For the reader's convenience, *figure 2* of **Courtney-EP** is

reproduced below.

FIG. 2A   FIG. 2B   FIG. 2C   FIG. 2D

FIG. 2E   FIG. 2F   FIG. 2G   FIG. 2H

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection over **Courtney-EP**

and **Olson** has a reasonable likelihood of prevailing because the general application of

the combination of **Courtney-EP** and **Olson** to **claims 20-21**, as presented in the

request and claim charts, teaches away from the limitation of *"providing a video device*

which detects an object upon analyzing a video from a single camera" because

Courtney-EP is being modified by the multiple smart cameras of **Olson**'s *figure 4*
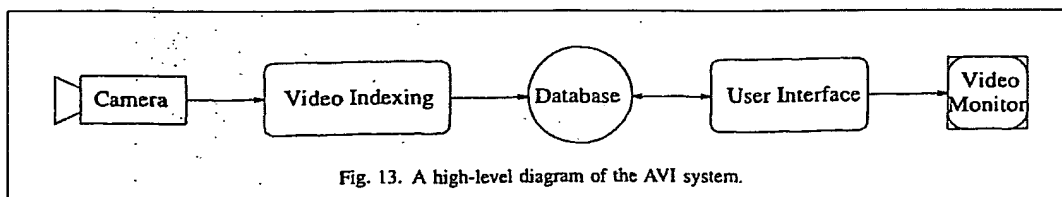
thereby resulting in a system/method for detecting an object in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of **claims 20-21** because the teaching of **Olson**, as presented in the request and claim charts, teaches away from the claimed invention.

Issue (H)

Requester proposed that **claims 20-21** are obvious over the combination of **Courtney-NPL** and **Olson**. The request and claim charts allege that **Courtney-NPL** discloses limitations of **claims 20-21** and **Olson** teaches limitations of **claims 20-21**. (*request pgs. 63-64 and claim charts pgs. 1202-1224*)
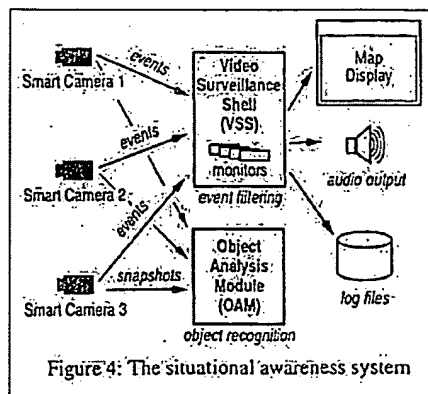
As to the limitation of "*providing a video device which detects an object upon analyzing a video from a single camera*", requester cites **Courtney-NPL** as disclosing this limitation and **Olson** as teaching this limitation. (*claim charts pgs. 1202-1204*) Since requester is citing **Courtney-NPL** and **Olson** for this single limitation, the examiner considers the combination of **Courtney-NPL** and **Olson**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Courtney-NPL** as disclosing this limitation in *pg. 616, col.2, figure 13, pg. 608, col.2, figures 1-2, pg. 609, cols. 1 and 2, and figure 13*. For the reader's convenience, *figure 13* of **Courtney-NPL** is reproduced below.

Fig. 13. A high-level diagram of the AVI system.

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4.*

For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection over **Courtney-NPL** and **Olson** has a reasonable likelihood of prevailing because the general application of the combination of **Courtney-NPL** and **Olson** to **claims 20-21**, as presented in the request and claim charts, teaches away from the limitation "*providing a video device which detects an object upon analyzing a video from a single camera*" because **Courtney-NPL's** *camera* is being modified by the multiple smart cameras of **Olson's** *figure 4* thereby resulting in a system/method for detecting an object in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of **claims 20-21** because the teaching of **Olson**, as presented in the request and claim charts, teaches away from the claimed invention.

Issue (I)

Requester proposed that **claims 20-21** are obvious over **Courtney-EP** and **Brill**. The examiner agrees that this obviousness rejection over **Courtney-EP** and **Brill** has a

reasonable likelihood of prevailing because the general application of **Courtney-EP** to

claims 20-21 in the claim charts appears reasonable. (*request pgs. 62-63 and claim charts*

pgs. 936-966) Also, the examiner is able to discern that this disclosure of **Courtney-EP**

combined with **Brill** is reasonably likely to prevail because *figure 1* of **Courtney-EP** and

Brill disclose identical systems for which the methods employed by the respective.

systems are likely to be obvious over one another. Therefore, requester has shown a

reasonable likelihood of prevailing with respect to this proposed obviousness rejection

of **claims 20-21**.

Issue (J)

Requester proposed that **claims 20-21** are obvious over **Courtney-NPL** and

Brill. The request and claim charts allege that **Courtney-NPL** discloses limitations of

claims 20-21 and **Brill** teaches limitations of **claims 20-21**. (*request pgs. 57-62 and claim*

charts pgs. 664-685)

Requester cites both **Courtney-NPL** and **Brill** for the single limitation of "*wherein*

the attributes to be detect are independent of the event to be detected". (*claim charts pgs.*

673-676) Since requester is citing both **Courtney-NPL** and **Brill** for this single limitation,

the examiner considers the combination of **Courtney-NPL** and **Brill**, as presented in

the request and claim charts, is required to meet this limitation.

Requester cites **Courtney-NPL** *pg. 610: col.1, pg. 612:cols.1- 2, pg. 614:col.2 to pg.*

615:cols.1-2, and figure 5 as disclosing this limitation and requester cites **Brill** *col.1:43-48,*

col.3:24-27, col.3:41-49, col.4:27-30 as teaching this claim limitation.

However, the motion segmentation, object tracking, hypothetical sequence of 1-D

frames, motion analysis stage, V-object indexing, depositor, and remover as disclosed

by **Courtney-NPL** and modified by **Brill**'s teaching of a "surveillance system

programmed to generate an alarm upon occurrence of a complex event made up of a

series of simple events" does not disclose or suggest that these stages of **Courtney-**

NPL are independent of the identified complex event made up of simple events. For at

least this reason, the examiner does <u>not</u> agree that this obviousness rejection over

Courtney-NPL and **Brill** has a reasonable likelihood of prevailing.

Issue (K)

Requester proposed that **claims 20-21** are obvious over the combination of

Winter, Lipton, and **Brill**. For the proposed rejection of **claims 20-21**, Requester

provides a detailed application of the combination of **Winter**, **Lipton**, and **Brill** to **claims**

20-21 in the request (*pgs. 65-73*) and the claim charts. (*pgs. 1439-1463*)

Requester cites **Winter** and **Brill** for the single limitation of "*wherein the*

attributes to be detected are independent of the event to be detected". (*claim charts pgs.*

1453-1454) Since requester is citing **Winter** and **Brill** for this single limitation, the

examiner considers the combination of **Winter** and **Brill**, as presented in the request

and claim charts, is required to meet this limitation.

Requester cites **Winter** *col.3:23-32 and col.73:56-64* as disclosing this limitation.

For the reader's convenience, these portions of **Winter** are reproduced below.

> According to still a further aspect of the invention, there is provided apparatus for analyzing video data, including a source of video data and a device for analyzing the video data provided by the source of video data to detect a first predetermined characteristic of the video data by performing a first predetermined analysis algorithm, and for performing a second predetermined analysis algorithm to detect a second predetermined characteristic of the video data when the analysis device detects the first predetermined characteristic.

> different characteristics of an incoming video stream. It is determined at step **2348** whether a first characteristic is present in an incoming stream of video images, by application of a first image analysis algorithm. If at step **2348** it is determined that the predetermined characteristic has been detected by the first analysis algorithm, then step **2350** follows, at which it is determined whether a second predetermined characteristic has been detected in the same incoming video stream using a second analysis algorithm. If so,

Requester cites **Brill** _col.1:43-48, col.3:24-27, col.3:41-49, and col.4:27-30_ as

teaching this limitation. For the reader's convenience, these portions of **Brill** are

reproduced below.

> Given a system which detects simple events, one can easily create a user interface that enables someone to define a complex event by constructing a list of sub-events. After one or more complex events have been defined, the sub-events of complex events defined later can be complex events themselves. As an alternative user interface, complex

> The basic system performs three data processing steps for every image of a video sequence to recognize events. The three steps are detecting objects, tracking objects, and analyzing the motion graph.

> Finally, to recognize events, the system analyzes the motion graph. The preferred, embodiment of the system recognizes the following vocabulary of events: ENTER, EXIT, REST, MOVE, DEPOSIT, REMOVE, LIGHTS-ON and LIGHTS-OUT. These events are examples of the most common in an office environment where the main interaction is between people and smaller stationary objects. Other examples would be applicable to monitoring outdoors, such as a parking lot.

> In the present invention the surveillance system can be
> programmed to only generate an alarm upon the occurrence
> 30 of a complex event made up of a series of simple events.
> Returning to the THEFT example, a better system would

As evidenced by the above disclosures, the combination of **Winter** and **Brill**

does not teach or make obvious *"wherein the attributes to be detected are independent*

of the event to be detected" because the three data processing steps of **Brill**'s basic

system for processing images of a video sequence to recognize events are not

disclosed as independent of ENTER, EXIT, REST, MOVE, DEPOSIT, REMOVE,

LIGHTS-ON, and LIGHT—OUT. As such, for at least this reason, Requester has <u>not</u>

shown a reasonable likelihood of prevailing with respect to this proposed obviousness
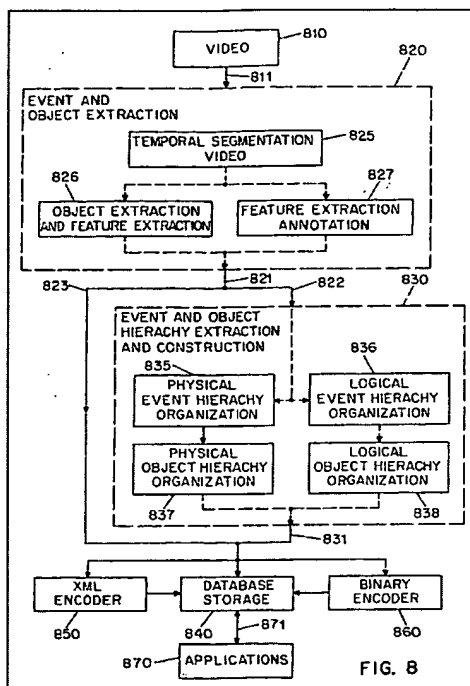
rejection.

Issue (L)

Requester proposed that <u>**claims 20-21**</u> are obvious over the combination of

Paek, Qian, and **Courtney-US**. For the proposed rejection of <u>**claims 20-21**</u>, Requester

provides a detailed application of the combination of **Paek, Qian,** and **Courtney-US** to

<u>**claims 20-21**</u> in the request (*pgs. 73-79*) and the claim charts. (*pgs. 1677-1694*)

Requester cites **Paek, Qian,** and **Courtney-US** for the single limitation of

obvious *"selecting a rule, which is not a rule used to detect any individual attribute, as a*

new user rule, the new user rule providing an analysis of a combination of the attributes

to detect an event that is not one of the detected attributes". (*claim charts pgs. 1684-1685*)

Since requester is citing **Paek, Qian,** and **Courtney-US** for this single limitation, the

examiner considers the combination of **Paek, Qian,** and **Courtney-US**, as presented in

the request and claim charts, is required to meet this limitation.

Requester cites **Paek** *col. 18:20-28 and col. 73:56-64* as disclosing this limitation.

Requester cites **Courtney-US** *col.4:45-52, fig. 4, and col.5:4-14* as teaching this limitation.

First, **Paek's** video object hierarchy descriptions do not disclose or make obvious

"selecting a rule, which is not a rule used to detect any individual attribute, as a new

user rule, the new user rule providing an analysis of a combination of the attributes to

detect an event that is not one of the detected attributes" because selection of a rule,

new or otherwise, is not discussed at all in this citation of **Paek**. Further, **Courtney-US's**

disclosure of "show me all objects that are removed from this region of the scene" is not

a 'new user rule' as claimed. As such, for at least this reason, Requester has <u>not</u> shown

a reasonable likelihood of prevailing with respect to this proposed obviousness rejection

of **claims 20-21**.

Issue (N)

Requester proposed that **claims 20-21** are obvious over the combination of

Paek, **Qian**, and **Shotton**. For the proposed rejection of **claims 20-21**, Requester

provides a detailed application of the combination of **Paek**, **Qian**, and **Shotton** to

claims 20-21 in the request (*pgs. 81-82*) and the claim charts. (*pgs. 1931-1952*)

As to the limitation of *"providing a video device which detects an object upon*

analyzing a video from a single camera", Requester cites **Paek** as disclosing this

limitation and **Shotton** as teaching this limitation. (*pgs. 1931-1933*) Since requester is

citing **Paek** and **Shotton** for this single limitation, the examiner considers the

combination of **Paek** and **Shotton**, as presented in the request and claim charts, is

required to meet this limitation.

Requester cites **Paek** _col.17:26-61 and figure 8_ as meeting this limitation. For the

reader's convenience **Paek's** _figure 8_ is reproduced below.

FIG. 8

Requester cites **Shotton** _§§2, 2.3, and figure 3_ as teaching this limitation. For the

reader's convenience, _figure 1_ of **Shotton**, which is described in _§2_ and models how the

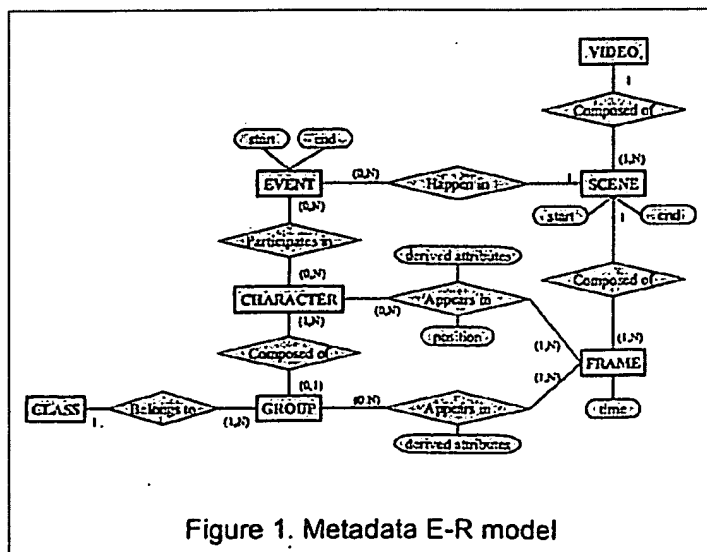specific intrinsic metadata data of the video content is stored, is reproduced below.
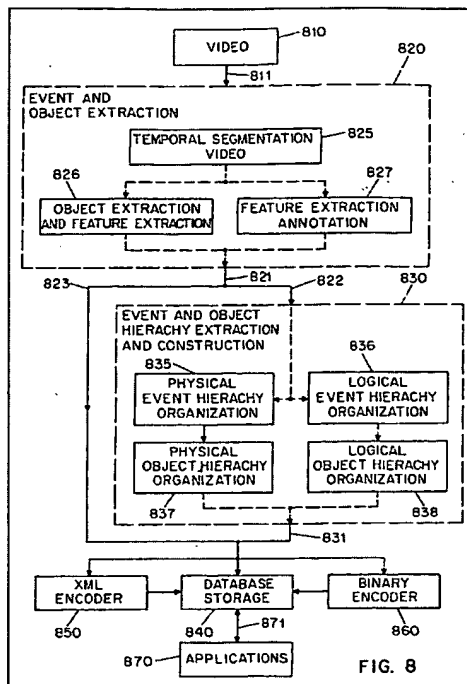

Figure 1. Metadata E-R model

This portion of **Shotton**, however, is silent as to the number of cameras and

Paek's _video #810_ is not disclosed as a single camera but rather is disclosed merely as

video data (_col.17:26-61_). As such, the examiner does <u>not</u> agree that this obviousness

rejection over **Paek, Qian,** and **Shotton** has a reasonable likelihood of prevailing ·

because the general application of the combination of **Paek, Qian,** and **Shotton** to

claims 20-21, as presented in the request and claim charts, does not disclose or make

obvious "_providing a video device which detects an object upon analyzing a video from_

a single camera" in combination with the other limitations of the claims.

Issue (P)

Requester proposed that **claims 20-21** are obvious over the combination of

Paek, Qian, Courtney-EP, and **Olson**. The request and claim charts allege that **Paek**

discloses limitations of **claims 20-21** and **Qian, Courtney-EP,** and **Olson** teaches

limitations of **claims 20-21**. (_request pgs. 84-85 and claim charts pgs. 2351-2406_)

As to the limitation _"providing a video device which detects an object upon_

analyzing a video from a single camera", requester cites **Paek** as disclosing this

limitation and **Qian, Courtney-EP,** and **Olson** as teaching this limitation. (_claim charts_

pgs. 2351-2359) Since requester is citing **Paek, Qian, Courtney-EP,** and **Olson** for this

single limitation, the examiner considers the combination of **Paek, Qian, Courtney-EP,**

and **Olson**, as presented in the request and claim charts, is required to meet this

limitation.

Requester cites **Paek** as disclosing this limitation at _col.17:26-61 and figure 8_. For

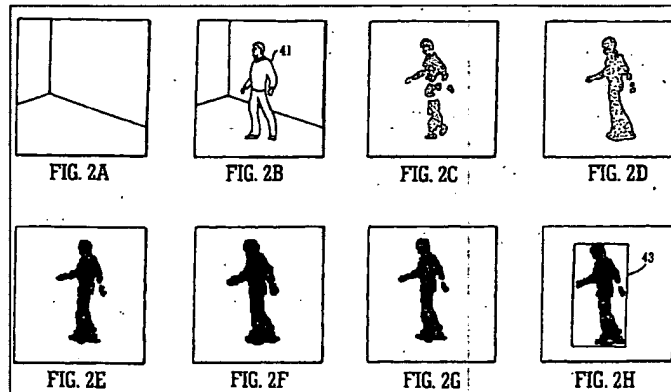the reader's convenience **Paek's** _figure 8_ is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at _col. 2:55 to col. 3:8 and figure 1_.

For the reader's convenience, _figure 1_ of **Qian** is reproduced below.
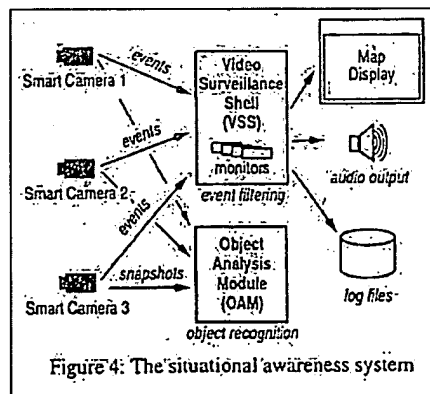

Requester cites **Courtney-EP** as disclosing this limitation in ¶¶_[0002], [0017],_

[0028] to [0034, and figure 2. For the reader's convenience, _figure 2_ of **Courtney-EP** is

reproduced below.

FIG. 2A   FIG. 2B   FIG. 2C   FIG. 2D

FIG. 2E   FIG. 2F   FIG. 2G   FIG. 2H

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection has a reasonable

likelihood of prevailing because the general application of the combination of **Paek**,

Qian, Courtney-EP, and **Olson** to <u>**claims 20-21**</u> in the request and claim charts

teaches away from the limitation "*providing a video device which detects an object upon*

analyzing a video from a single camera" because the combination of **Paek, Qian,** and

Courtney-EP is being modified by the <u>multiple</u> smart cameras of **Olson's** *figure 4*

thereby resulting in a system/method for detecting an object in videos from <u>multiple</u>

cameras and not the claimed <u>single</u> camera. For at least this reason, requester has <u>not</u>

shown a reasonable likelihood of prevailing with respect to this proposed obviousness

rejection of **claims 20-21** because the teaching of **Olson**, as presented in the request

and claim charts, teaches away from the claimed invention.

Issue (Q)

Requester proposed that **claims 20-21** are obvious over the combination of

Paek, Qian, Courtney-EP, and **Brill**. For the proposed rejection of **claims 20-21**,

Requester provides a detailed application of the combination of **Paek, Qian, Courtney-**

EP, and **Brill** to **claims 20-21** in the request (*pgs. 87-88*) and the claim charts. (*pgs. 3253-*

3307)

As to the limitation of "*selecting a rule, which is to a rule used to detect any*

individual attribute, as a new user rule, the new user rule providing analysis of a

combination of the attributes to detect an event that is not one of the detected

attributes", Requester cites **Paek** as disclosing this limitation and **Courtney-EP,** and

Brill as teaching this limitation. (*claim charts pgs. 3275-3280*) Since requester is citing

Paek, Courtney-EP, and **Brill** for this single limitation, the examiner considers the

combination of **Paek, Courtney-EP**, and **Brill**, as presented in the request and claim

charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col.18:20-28*. Requester cites

Courtney-EP as disclosing this limitation at *[0069] to [0071] and figure 9*. Requester

cites **Brill** as disclosing this limitation at *col.10:59 to col.11:25, fig. 7, col.4:27-36*.

First, **Paek's** video object hierarchy descriptions do not disclose or make obvious

this limitation because selection of a rule, new or otherwise, is not discussed in this

citation of **Paek**. Further, in the context of Requester's proposed rejection, **Courtney-**

EP's *event selection box #136* does not make obvious the claimed 'new user rule' because

Courtney-EP's disclosed events, such as LOITERING, is selected *prior* to detecting the

claimed plurality of attributes, not *after* detecting the claimed plurality of attributes. In

addition, **Brill**'s definition of simple and/or complex events does not make obvious this

limitaiton because, as presented in the claim charts, there is no suggestion of selecting

a new user rule in response to the detection of one of the complex events, such as

THEFT EVENT, made up of a series of simple events such as the *REMOVE EVENT*

followed by the *EXIT EVENT*. As such, for at least these reasons, Requester has <u>not</u>

shown a reasonable likelihood of prevailing with respect to this proposed obviousness

rejection of **claims 20-21**.

Issue (R)

Requester proposed that **claims 20-21** are obvious over the combination of

Paek, Qian, Courtney-NPL, and **Brill**. For the proposed rejection of **claims 20-21**,

Requester provides a detailed application of the combination of **Paek, Qian, Courtney-**

NPL, and **Brill** to **claims 20-21** in the request (*pgs. 85-86*) and the claim charts. (*pgs.*

2813-2850)

As to the limitation of *"selecting a rule, which is to a rule used to detect any*

individual attribute, as a new user rule, the new user rule providing analysis of a

combination of the attributes to detect an event that is not one of the detected

attributes", Requester cites **Paek** as disclosing this limitation and **Courtney-NPL**, and

Brill as teaching this limitation. (*claim charts pgs. 2827-2832*) Since requester is citing

Paek, Courtney-NPL, and **Brill** for this single limitation, the examiner considers the

combination of **Paek**, **Courtney-NPL**, and **Brill**, as presented in the request and claim

charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col.18:20-28*. Requester cites

Courtney-NPL as disclosing this limitation at *pg. 607 cols. 1 to 2, pg. 616 col.1, pg. 617*

col.2 to pg. 618 cols. 1 and 2. Requester cites **Brill** as disclosing this limitation at *col.10:59*

to col.11:25, fig. 7, col.4:27-36.

First, **Paek's** video object hierarchy descriptions do not disclose or make obvious

this limitation because selection of a rule, new or otherwise, is not discussed in this

citation of **Paek**. Further, in the context of Requester's proposed rejection, **Courtney-**

NPL's context based retrieval system by which the automatic video indexing (AVI)

system may specify queries on video sequences does not make obvious the claimed

'new user rule' because **Courtney-NPL's** disclosed queries, such as "show me all

objects that were removed from this region of the scene between 8am and 9am", is

selected *prior* to detecting the claimed plurality of attributes, not *after* detecting the

claimed plurality of attributes. In addition, **Brill's** definition of simple and/or complex

events does not make obvious this limitation because, as presented in the claim charts,

there is no suggestion of selecting a new user rule in response to the detection of one of

the complex events, such as *THEFT EVENT*, made up of a series of simple events such

as the *REMOVE EVENT* followed by the *EXIT EVENT*. As such, for at least these

reasons, Requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to

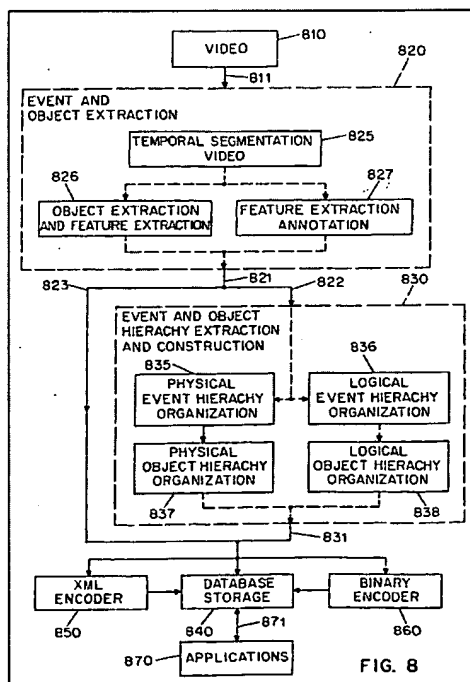this proposed obviousness rejection of **<u>claims 20-21</u>**.

Issue (S)

Requester proposed that **claims 20-21** are obvious over the combination of

Paek, **Qian**, **Courtney-NPL**, and **Olson**. The request and claim charts allege that **Paek**

discloses limitations of **claims 20-21** and **Qian**, **Courtney-NPL**, and **Olson** teaches

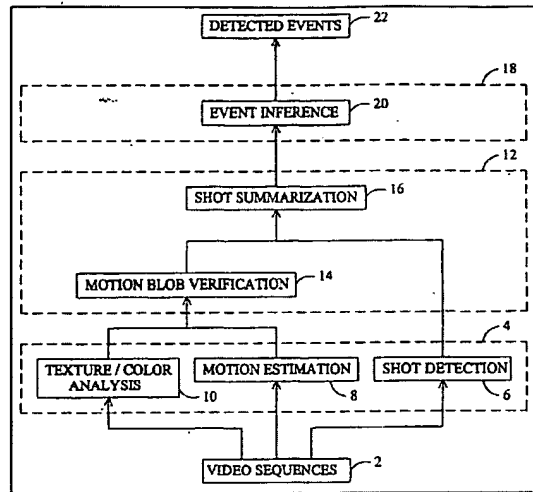limitations of **claims 20-21**. (*request pgs. 88-89 and claim charts pgs. 3693-3729*)

As to the limitation of "*providing a video device which detects an object upon*

analyzing a video from a single camera", Requester cites **Paek** as disclosing this

limitation and **Qian, Courtney-NPL,** and **Olson** as teaching this limitation. (*claim charts*

pgs. 3693-3696)

Requester cites **Paek** as disclosing this limitation at *col.17:26-61 and figure 8*. For

the reader's convenience **Paek**'s *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at *col.2:55 to col.3:8 and figure 1*.

For the reader's convenience, *figure 1* of **Qian** is reproduced below.

Requester cites **Courtney-NPL** as disclosing this limitation in *pg. 616, col.2, figure 13, pg. 608, col.2, figure 1, pg. 609, cols. 1 and 2, and figure 13*. For the reader's convenience, *figure 13* of **Courtney-NPL** is reproduced below.

Fig. 13. A high-level diagram of the AVI system.

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

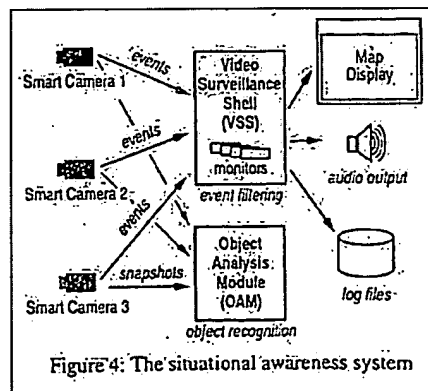For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does not agree that this obviousness rejection over **Paek**, **Qian**,

Courtney-NPL and **Olson** has a reasonable likelihood of prevailing because the

general application of the combination of **Paek**, **Qian**, **Courtney-NPL**, and **Olson** to

claims 20-21 in the request and claim charts teaches away from the limitation of

"*providing a video device which detects an object upon analyzing a video from a single*

camera" because the combination of **Paek, Qian,** and **Courtney-NPL** is being modified

by the multiple smart cameras of **Olson**'s *figure 4* thereby resulting in a system/method

for detecting an object in videos from multiple cameras and not the claimed single

camera. For at least this reason, requester has not shown a reasonable likelihood of

prevailing with respect to this proposed obviousness rejection of **claims 20-21** because

the teaching of **Olson**, as presented in the request and claim charts, teaches away from

the claimed invention.

CLAIMS 22-28

For the reasons set forth below, the following issues have been determined to have a reasonable likelihood of prevailing for the identified claims, and will be addressed in the non-final action.

Issue (A): **Claims 22-28** anticipated by **Courtney-US.**

Issue (D): **Claims 22-28** anticipated by **Shotton.**

Issue (I): **Claims 22-28** obvious over **Courtney-EP** and **Brill.**

For the reasons set forth below, the following issues have been determined to NOT have a reasonable likelihood of prevailing for the identified claims, and will NOT be addressed in the non-final action.

Issue (G): **Claims 22-28** obvious over **Courtney-EP** and **Olson.**

Issue (H): **Claims 22-28** obvious over **Courtney-NPL** and **Olson.**

Issue (J): **Claims 22-28** obvious over **Courtney-NPL** and **Brill.**

Issue (K): **Claims 22-28** obvious over **Winter, Lipton,** and **Brill.**

Issue (L): **Claims 22-28** obvious over **Paek, Qian,** and **Courtney-US.**

Issue (N): **Claims 22-28** obvious over **Paek, Qian,** and **Shotton.**

Issue (P): **Claims 22-28** obvious over **Paek, Qian, Courtney-EP,** and **Olson.**

Issue (Q): **Claims 22-28** obvious over **Paek, Qian, Courtney-EP,** and **Brill.**

Issue (R): **Claims 22-28** obvious over **Paek, Qian, Courtney-NPL,** and **Brill.**

Issue (S): **Claims 22-28** obvious over **Paek, Qian, Courtney-NPL,** and **Olson.**

Issue (A)

Requester proposed that **claims 22-28** are anticipated by **Courtney-US.** The examiner agrees that this anticipation rejection over **Courtney-US** has a reasonable

likelihood of prevailing because the general application of **Courtney-US** to <u>**claims 22-28**</u> in the claim charts appears reasonable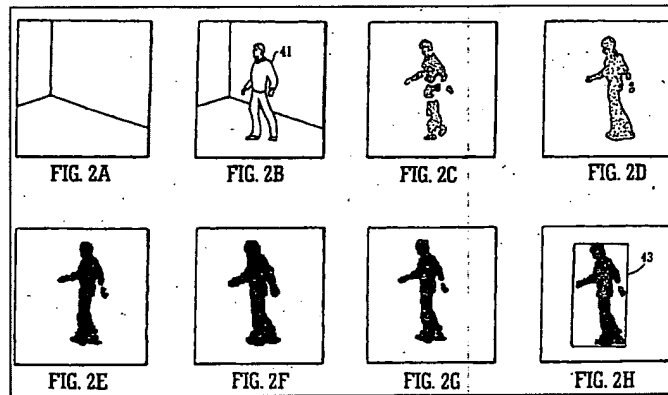. (*request pgs. 28-32 and claim charts pgs. 45-55*) Therefore, requester has shown a reasonable likelihood of prevailing with respect to this proposed anticipation rejection of <u>**claims 22-28**</u>.
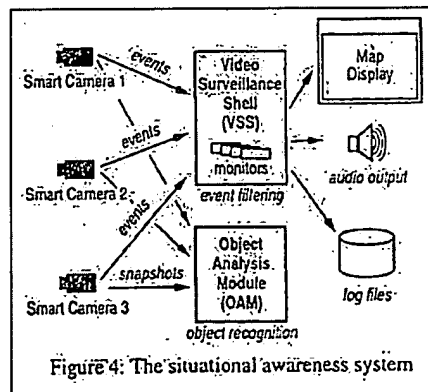
Issue (D)

Requester proposed that <u>**claims 22-28**</u> are anticipated by **Shotton**. The examiner agrees that this anticipation rejection over **Shotton** has a reasonable likelihood of prevailing because the general application of **Shotton** to <u>**claims 22-28**</u> in in the request (*pgs. 38-42*) and the claim charts appears reasonable. (*pgs. 143-157*) Therefore, requester has shown a reasonable likelihood of prevailing with respect to this proposed anticipation rejection of <u>**claims 22-28**</u>.

Issue (G)

Requester proposed that <u>**claims 22-28**</u> are obvious over the combination of **Courtney-EP** and **Olson**. The request and claim charts allege that **Courtney-EP** discloses limitations of <u>**claims 22-28**</u> and **Olson** teaches limitations of <u>**claims 22-28**</u>. (*request pgs. 51-57 and claim charts pgs. 406-461*)

As to the limitation of "*detecting an object in a video from a single camera*", requester cites **Courtney-EP** as disclosing this limitation and **Olson** as teaching this limitation. (*claim charts pgs. 406-411*) Since requester is citing **Courtney-EP** and **Olson** for this single limitation, the examiner considers the combination of **Courtney-EP** and **Olson**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Courtney-EP** as disclosing this limitation in ¶¶*[0002], [0017],*

[0028] to [0034], and figure 2. For the reader's convenience, *figure 2* of **Courtney-EP** is

reproduced below.

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

For the reader's convenience, *figure 4* of **Olson** is reproduced below.

The examiner does **not** agree that this obviousness rejection over **Courtney-EP**

and **Olson** has a reasonable likelihood of prevailing because the general application of

the combination of **Courtney-EP** and **Olson** to **claims 22-28**, as presented in the

request and claim charts, teaches away from the limitation of "*detecting an object in a*

video from a single camera" because **Courtney-EP** is being modified by the multiple

smart cameras of **Olson**'s *figure 4* thereby resulting in a system/method for detecting an

object in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera. For at least

this reason, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect

to this proposed obviousness rejection of **claims 22-28** because the teaching of **Olson**,

as presented in the request and claim charts, teaches away from the claimed invention.

Issue (H)

Requester proposed that **claims 22-28** are obvious over the combination of

Courtney-NPL and **Olson**. The request and claim charts allege that **Courtney-NPL**

discloses limitations of **claims 22-28** and **Olson** teaches limitations of **claims 22-28**.

(*request pgs. 63-64 and claim charts pgs. 1225-1258*)

As to the limitation of "*detecting an object in a video from a single camera*",

requester cites **Courtney-NPL** as disclosing this limitation and **Olson** as teaching this

limitation. (*claim charts pgs. 1225-1227*) Since requester is citing **Courtney-NPL** and

Olson for this single limitation, the examiner considers the combination of **Courtney-**

NPL and **Olson**, as presented in the request and claim charts, is required to meet this

limitation.

Requester cites **Courtney-NPL** as disclosing this limitation in *pg. 616, col.2, figure*

13, pg. 608, col.2, figures 1-2, pg. 609, cols. 1 and 2, and figure 13. For the reader's

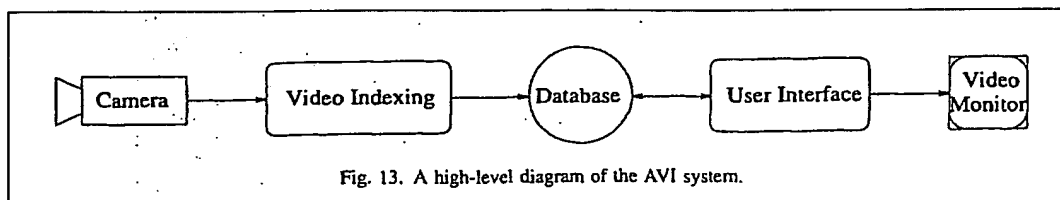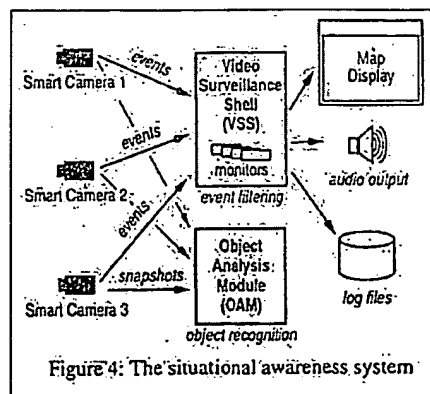convenience, *figure 13* of **Courtney-NPL** is reproduced below.

Fig. 13. A high-level diagram of the AVI system.

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection over **Courtney-NPL** and **Olson** has a reasonable likelihood of prevailing because the general application of the combination of **Courtney-NPL** and **Olson** to <u>**claims 22-28**</u>, as presented in n the request and claim charts, teaches away from the limitation "*detecting an object in a video from a single camera*" because **Courtney-NPL**'s *camera* is being modified by the multiple smart cameras of **Olson**'s *figure 4* thereby resulting in a system/method for detecting an object in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of <u>**claims 22-28**</u> because the teaching of **Olson**, as presented in the request and claim charts, teaches away from the claimed invention.

<u>Issue (I)</u>

Requester proposed that <u>**claims 22-28**</u> are obvious over **Courtney-EP** and **Brill**. The examiner agrees that this obviousness rejection over **Courtney-EP** and **Brill** has a

reasonable likelihood of prevailing because the general application of **Courtney-EP** to

claims 22-28 in the claim charts appears reasonable. (*request pgs. 62-63 and claim charts*

pgs. 967-1020) Also, the examiner is able to discern that this disclosure of **Courtney-EP**

combined with **Brill** is reasonably likely to prevail because *figure 1* of **Courtney-EP** and

Brill disclose identical systems for which the methods employed by the respective

systems are likely to be obvious over one another. Therefore, requester has shown a

reasonable likelihood of prevailing with respect to this proposed obviousness rejection

of **claims 22-28**.

Issue (J)

Requester proposed that **claims 22-28** are obvious over **Courtney-NPL** and

Brill. The request and claim charts allege that **Courtney-NPL** discloses limitations of

claims 22-28 and **Brill** teaches limitations of **claims 22-28**. (*request pgs. 57-62 and claim*

charts pgs. 686-727)

Requester cites both **Courtney-NPL** and **Brill** for the single limitation of "*wherein*

the plurality of attributes that are detected are independent of which event is identified".

(*claim charts pgs. 701-704*) Since requester is citing both **Courtney-NPL** and **Brill** for this

single limitation, the examiner considers the combination of **Courtney-NPL** and **Brill**, as

presented in the request and claim charts, is required to meet this limitation.

Requester cites **Courtney-NPL** *pg. 610: col.1, pg. 612:cols.1- 2, pg. 614:col.2 to pg.*

615:cols.1-2, and figure 5 as disclosing this limitation and requester cites **Brill** *col.1:43-48,*

col.3:24-27, col.3:41-49, col.4:27-30 as teaching this claim limitation.

However, the motion segmentation, object tracking, hypothetical sequence of 1-D

frames, motion analysis stage, V-object indexing, depositor, and remover as disclosed

by **Courtney-NPL** and modified by **Brill**'s teaching of a "surveillance system

programmed to generate an alarm upon occurrence of a complex event made up of a

series of simple events" does not disclose or suggest that these stages of **Courtney-**

NPL are independent of the identified complex event made up of simple events. For at

least this reason, the examiner does <u>not</u> agree that this obviousness rejection over

Courtney-NPL and **Brill** has a reasonable likelihood of prevailing.

Issue (K)

Requester proposed that **claims 22-28** are obvious over the combination of

Winter, Lipton, and **Brill**. For the proposed rejection of **claims 22-28**, Requester

provides a detailed application of the combination of **Winter**, **Lipton**, and **Brill** to **claims**

22-28 in the request (_pgs. 65-73_) and the claim charts. (_pgs. 1464-1510_)

Requester cites **Winter** and **Brill** for the single limitation of "_wherein the plurality_

of attributes that are detected are independent of which event is identified". (_claim charts_

pgs. 1483-1484) Since requester is citing **Winter** and **Brill** for this single limitation, the

examiner considers the combination of **Winter** and **Brill**, as presented in the request

and claim charts, is required to meet this limitation.

Requester cites **Winter** _col.3:23-32 and col.73:56-64_ as disclosing this limitation.

For the reader's convenience, these portions of **Winter** are reproduced below.

> According to still a further aspect of the invention, there is provided apparatus for analyzing video data, including a source of video data and a device for analyzing the video data provided by the source of video data to detect a first predetermined characteristic of the video data by performing a first predetermined analysis algorithm, and for performing a second predetermined analysis algorithm to detect a second predetermined characteristic of the video data when the analysis device detects the first predetermined characteristic.

> different characteristics of an incoming video stream. It is determined at step **2348** whether a first characteristic is present in an incoming stream of video images, by application of a first image analysis algorithm. If at step **2348** it is determined that the predetermined characteristic has been detected by the first analysis algorithm, then step **2350** follows, at which it is determined whether a second predetermined characteristic has been detected in the same incoming video stream using a second analysis algorithm. If so,

Requester cites **Brill** _col.1:43-48, col.3:24-27, col.3:41-49, and col.4:27-30_ as

teaching this limitation. For the reader's convenience, these portions of **Brill** are

reproduced below.

> Given a system which detects simple events, one can easily create a user interface that enables someone to define a complex event by constructing a list of sub-events. After one or more complex events have been defined, the sub-events of complex events defined later can be complex events themselves. As an alternative user interface, complex

> The basic system performs three data processing steps for every image of a video sequence to recognize events. The three steps are detecting objects, tracking objects, and analyzing the motion graph.

> Finally, to recognize events, the system analyzes the motion graph. The preferred, embodiment of the system recognizes the following vocabulary of events: ENTER, EXIT, REST, MOVE, DEPOSIT, REMOVE, LIGHTS-ON and LIGHTS-OUT. These events are examples of the most common in an office environment where the main interaction is between people and smaller stationary objects. Other examples would be applicable to monitoring outdoors, such as a parking lot.

> In the present invention the surveillance system can be
> programmed to only generate an alarm upon the occurrence
> of a complex event made up of a series of simple events.
> 30 Returning to the THEFT example, a better system would

As evidenced by the above disclosures, the combination of **Winter** and **Brill** does not teach or make obvious *"wherein the plurality of attributes that are detected are independent of which event is identified"* because the three data processing steps of **Brill**'s basic system for processing images of a video sequence to recognize events are not disclosed as independent of ENTER, EXIT, REST, MOVE, DEPOSIT, REMOVE, LIGHTS-ON, and LIGHT—OUT. As such, for at least this reason, Requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection.

Issue (L)

Requester proposed that <u>**claims 22-28**</u> are obvious over the combination of **Paek, Qian,** and **Courtney-US**. For the proposed rejection of <u>**claims 22-28**</u>, Requester provides a detailed application of the combination of **Paek, Qian,** and **Courtney-US** to <u>**claims 22-28**</u> in the request (*pgs. 73-79*) and the claim charts. (*pgs. 1695-1728*)

Requester cites **Paek, Qian,** and **Courtney-US** for the single limitation of obvious *"selecting a new user rule after detecting the plurality of attributes"*. (*claim charts pgs. 1703-1704*) Since requester is citing **Paek, Qian,** and **Courtney-US** for this single limitation, the examiner considers the combination of **Paek, Qian,** and **Courtney-US**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Paek** *col.18:20-28 and col.73:56-64* as disclosing this limitation. Requester cites **Courtney-US** *col.4:45-52, fig. 4, and col.5:4-14* as teaching this limitation.
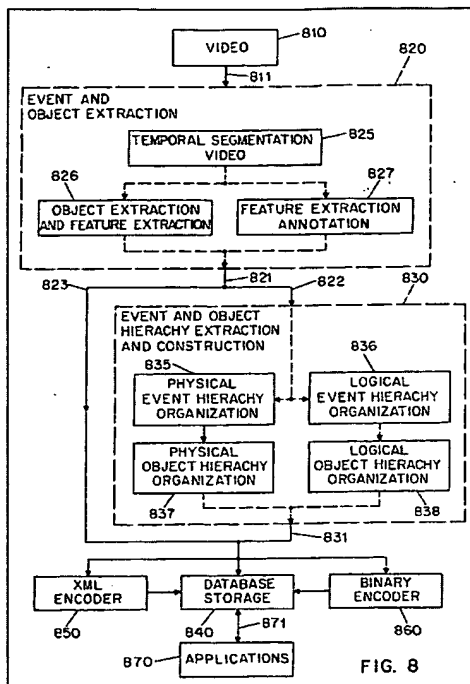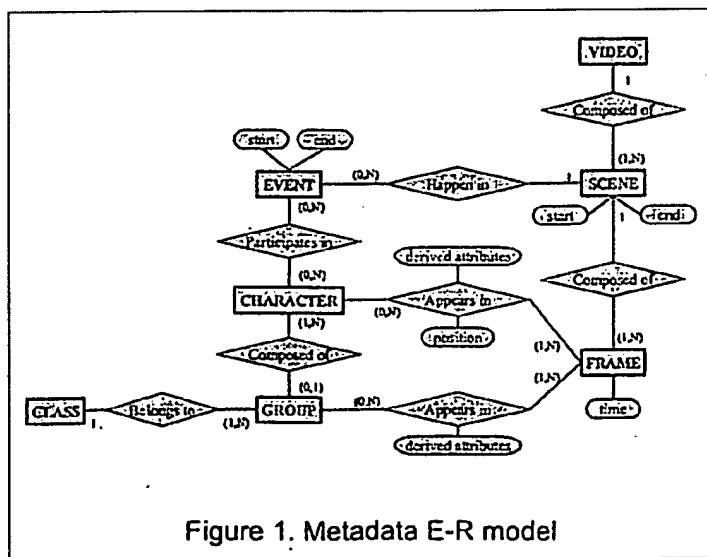
First, **Paek's** video object hierarchy descriptions do not disclose or make obvious

"selecting a new user rule after detecting the plurality of attributes" because selection of

a rule, new or otherwise, is not discussed at all in this citation of **Paek**. Further,

Courtney-US's disclosure of "show me all objects that are removed from this region of

the scene" is not a 'new user rule' as claimed. As such, for at least this reason,

Requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this

proposed obviousness rejection of <u>**claims 22-28**</u>.

<u>**Issue (N)**</u>

Requester proposed that <u>**claims 22-28**</u> are obvious over the combination of

Paek, **Qian**, and **Shotton**. For the proposed rejection of <u>**claims 22-28**</u>, Requester

provides a detailed application of the combination of **Paek**, **Qian**, and **Shotton** to

<u>**claims 22-28**</u> in the request (*pgs. 81-82*) and the claim charts. (*pgs. 1953-1993*)

As to the limitation of *"detecting an object in a video from a single camera"*,

Requester cites **Paek** as disclosing this limitation and **Qian** and **Olson** as teaching this

limitation. (*pgs. 1953-1956*) Since requester is citing **Paek** and **Shotton** for this single

limitation, the examiner considers the combination of **Paek** and **Shotton**, as presented

in the request and claim charts, is required to meet this limitation.

Requester cites **Paek** *col.17:26-61 and figure 8* as meeting this limitation. For the

reader's convenience **Paek's** *figure 8* is reproduced below.

FIG. 8

Requester cites **Shotton** *§§2, 2.3, and figure 3* as teaching this limitation. For the

reader's convenience, *figure 1* of **Shotton**, which is described in *§2* and models how the

specific intrinsic metadata data of the video content is stored, is reproduced below.

Figure 1. Metadata E-R model

This portion of **Shotton**, however, is silent as to the number of cameras and

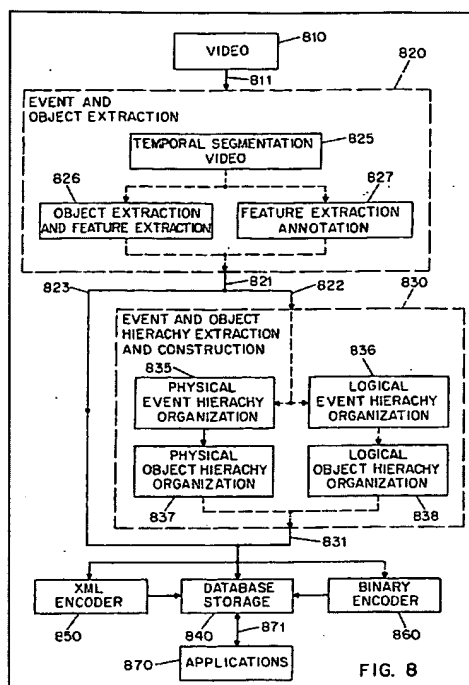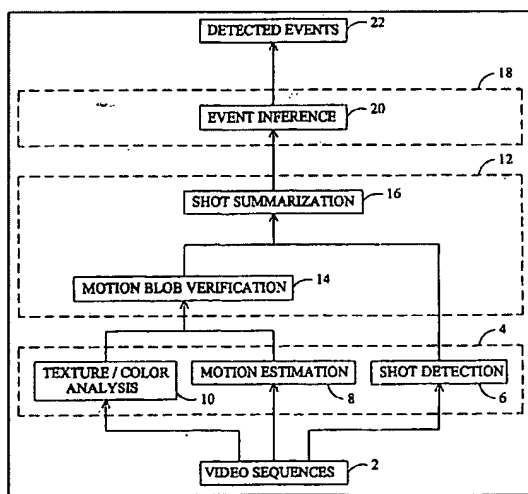**Paek's** *video #810* is not disclosed as a single camera but rather is disclosed merely as

video data (*col.17:26-61*). As such, the examiner does not agree that this obviousness

rejection over **Paek, Qian,** and **Shotton** has a reasonable likelihood of prevailing

because the general application of the combination of **Paek, Qian,** and **Shotton** to

claims 22-28, as presented in the request and claim charts, does not disclose or make

obvious *"detecting an object in a video from a single camera"* in combination with the

other limitations of the claims.

Issue (P)

Requester proposed that **claims 22-28** are obvious over the combination of

Paek, Qian, Courtney-EP, and **Olson**. The request and claim charts allege that **Paek**

discloses limitations of **claims 22-28** and **Qian, Courtney-EP,** and **Olson** teaches

limitations of **claims 22-28**. (*request pgs. 84-85 and claim charts pgs. 2407-2490*)

As to the limitation *"detecting an object in a video from a single camera"*,

requester cites **Paek** as disclosing this limitation and **Qian, Courtney-EP,** and **Olson** as

teaching this limitation. (*claim charts pgs. 2407-2415*) Since requester is citing **Paek,**

Qian, Courtney-EP, and **Olson** for this single limitation, the examiner considers the

combination of **Paek, Qian, Courtney-EP,** and **Olson**, as presented in the request and

claim charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col.17:26-61 and figure 8*. For

the reader's convenience **Paek's** *figure 8* is reproduced below.
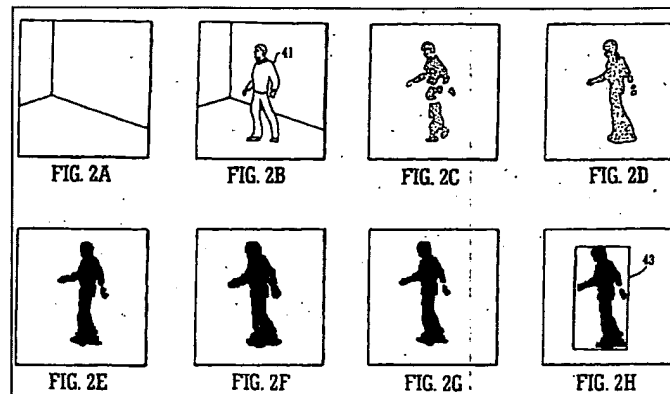
FIG. 8

Requester cites **Qian** as teaching this limitation at _col.2:55 to col.3:8 and figure 1_.

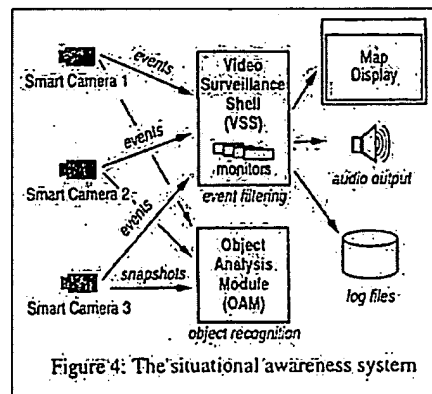For the reader's convenience, _figure 1_ of **Qian** is reproduced below.

Requester cites **Courtney-EP** as disclosing this limitation in ¶¶_[0002], [0017],_

[0028] to [0034, and figure 2. For the reader's convenience, _figure 2_ of **Courtney-EP** is

reproduced below.

FIG. 2A   FIG. 2B   FIG. 2C   FIG. 2D

FIG. 2E   FIG. 2F   FIG. 2G   FIG. 2H

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection has a reasonable

likelihood of prevailing because the general application of the combination of **Paek**,

Qian, **Courtney-EP**, and **Olson** to <u>**claims 22-28**</u> in the request and claim charts

teaches away from the limitation *"detecting an object in a video from a single camera"*

because the combination of **Paek, Qian,** and **Courtney-EP** is ultimately being modified

by the <u>multiple</u> smart cameras of **Olson's** *figure 4* thereby resulting in a system/method

for detecting an object in videos from <u>multiple</u> cameras and not the claimed <u>single</u>

camera. For at least this reason, requester has <u>not</u> shown a reasonable likelihood of

prevailing with respect to this proposed obviousness rejection of <u>**claims 22-28**</u> because

the teaching of **Olson**, as presented in the request and claim charts, teaches away from

the claimed invention.

Issue (Q)

Requester proposed that **claims 22-28** are obvious over the combination of

Paek, Qian, Courtney-EP, and **Brill**. For the proposed rejection of **claims 22-28**,

Requester provides a detailed application of the combination of **Paek, Qian, Courtney-**

EP, and **Brill** to **claims 22-28** in the request (*pgs. 87-88*) and the claim charts. (*pgs. 3308-*

3390)

As to the limitation of limitation "*selecting a new user.rule after detecting the*

plurality of attributes", Requester cites **Paek** as disclosing this limitation and **Courtney-**

EP, and **Brill** as teaching this limitation. (*claim charts pgs. 3330-3335*) Since requester is

citing **Paek, Courtney-EP**, and **Brill** for this single limitation, the examiner considers the

combination of **Paek, Courtney-EP**, and **Brill**, as presented in the request and claim

charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col.18:20-28*. Requester cites

Courtney-EP as disclosing this limitation at *[0069] to [0071] and figure 9*. Requester

cites **Brill** as disclosing this limitation at *col.10:59 to col.11:25, fig. 7, col.4:27-36*.

First, **Paek's** video object hierarchy descriptions do not disclose or make obvious

this limitation because selection of a rule, new or otherwise, is not discussed in this

citation of **Paek**. Further, in the context of Requester's proposed rejection, **Courtney-**

EP's *event selection box #136* does not make obvious the claimed 'new user rule' because

Courtney-EP's disclosed events, such as LOITERING, is selected *prior* to detecting the

claimed plurality of attributes, not *after* detecting the claimed plurality of attributes. In addition, **Brill**'s definition of simple and/or complex events does not make obvious this limitation because, as presented in the claim charts, there is no suggestion of selecting a new user rule in response to the detection of one of the complex events, such as *THEFT EVENT*, made up of a series of simple events such as the *REMOVE EVENT* followed by the *EXIT EVENT*. As such, for at least these reasons, Requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of **claims 22-28**.
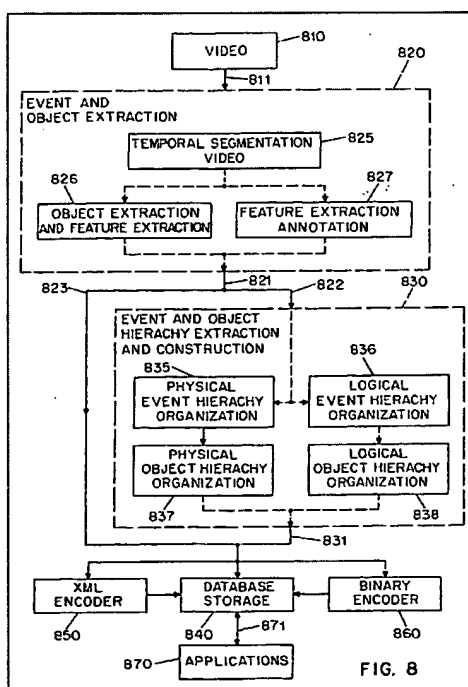
Issue (R)

Requester proposed that **claims 22-28** are obvious over the combination of **Paek, Qian, Courtney-NPL**, and **Brill**. For the proposed rejection of **claims 22-28**, Requester provides a detailed application of the combination of **Paek, Qian, Courtney-NPL**, and **Brill** to **claims 22-28** in the request (*pgs. 85-86*) and the claim charts. (*pgs. 2851-2918*)

As to the limitation of "*selecting a new user rule after detecting the plurality of attributes*", Requester cites **Paek** as disclosing this limitation and **Courtney-NPL**, and **Brill** as teaching this limitation. (*claim charts pgs. 2866-2870*) Since requester is citing **Paek, Courtney-NPL**, and **Brill** for this single limitation, the examiner considers the combination of **Paek, Courtney-NPL**, and **Brill**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col.18:20-28*. Requester cites **Courtney-NPL** as disclosing this limitation at *pg. 607 cols. 1 to 2, pg. 616 col.1, pg. 617*

col.2 to pg. 618 cols. 1 and 2. Requester cites **Brill** as disclosing this limitation at *col.10:59*

to col.11:25, fig. 7, col.4:27-36.

First, **Paek's** video object hierarchy descriptions do not disclose or make obvious

this limitation because selection of a rule, new or otherwise, is not discussed in this

citation of **Paek**. Further, in the context of Requester's proposed rejection, **Courtney-**

NPL's context based retrieval system by which the automatic video indexing (AVI)

system may specify queries on video sequences does not make obvious the claimed

'new user rule' because **Courtney-NPL**'s disclosed queries, such as "show me all

objects that were removed from this region of the scene between 8am and 9am", is

selected *prior* to detecting the claimed plurality of attributes, not *after* detecting the

claimed plurality of attributes. In addition, **Brill**'s definition of simple and/or complex

events does not make obvious this limitation because, as presented in the claim charts,

there is no suggestion of selecting a new user rule in response to the detection of one of

the complex events, such as *THEFT EVENT*, made up of a series of simple events such

as the *REMOVE EVENT* followed by the *EXIT EVENT*. As such, for at least these

reasons, Requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to

this proposed obviousness rejection of **claims 22-28**.

Issue (S)

Requester proposed that **claims 22-28** are obvious over the combination of

Paek, **Qian**, **Courtney-NPL**, and **Olson**. The request and claim charts allege that **Paek**

discloses limitations of **claims 22-28** and **Qian**, **Courtney-NPL**, and **Olson** teaches

limitations of **claims 22-28**. (*request pgs. 88-89 and claim charts pgs. 3730-3787*)
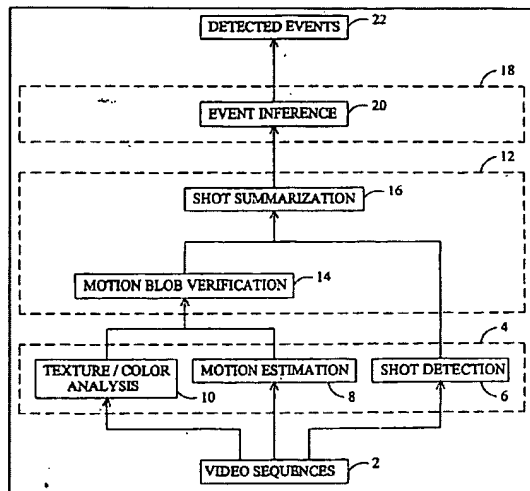
As to the limitation of "*detecting an object in a video from a single camera*",

Requester cites **Paek** as disclosing this limitation and **Qian, Courtney-NPL,** and **Olson**

as teaching this limitation. (*claim charts pgs. 3730-3733*) Since requester is citing **Paek,**

Courtney-NPL, and **Olson** for this single limitation, the examiner considers the

combination of **Paek, Courtney-NPL,** and **Olson,** as presented in the request and claim

charts, is required to meet the limitation of "*detecting an object in a video from a single*

camera".

Requester cites **Paek** as disclosing this limitation at *col.17:26-61 and figure 8*. For

the reader's convenience **Paek**'s *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at *col.2:55 to col.3:8 and figure 1*.

For the reader's convenience, *figure 1* of **Qian** is reproduced below.

Requester cites **Courtney-NPL** as disclosing this limitation in *pg. 616, col.2, figure 13, pg. 608, col.2, figure 1, pg. 609, cols. 1 and 2, and figure 13*. For the reader's convenience, *figure 13* of **Courtney-NPL** is reproduced below.

Fig. 13. A high-level diagram of the AVI system.

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection has a reasonable likelihood of prevailing because the general application of the combination of **Paek**, **Qian**, **Courtney-NPL**, and **Olson** to <u>**claims 22-28**</u>, as presented in the request and claim charts, teaches away from the limitation of "*detecting an object in a video from a single camera*" because the combination of **Paek, Qian,** and **Courtney-NPL** is ultimately being modified by the <u>multiple</u> smart cameras of **Olson**'s *figure 4* thereby resulting in a system/method for detecting an object in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of <u>**claims 22-28**</u> because the teaching of **Olson**, as presented in the request and claim charts, teaches away from the claimed invention.

CLAIM 29

For the reasons set forth below, the following issues have been determined to have a reasonable likelihood of prevailing for the identified claims, and will be addressed in the non-final action.

Issue (F):   **Claim 29** obvious over **Shotton** and **Brill**.

Issue (I):   **Claim 29** obvious over **Courtney-EP** and **Brill**.

For the reasons set forth below, the following issues have been determined to NOT have a reasonable likelihood of prevailing for the identified claims, and will NOT be addressed in the non-final action.

Issue (C):   **Claim 29** obvious over **Courtney-US** and **Olson**.

Issue (G):   **Claim 29** obvious over **Courtney-EP** and **Olson**.

Issue (H):   **Claim 29** obvious over **Courtney-NPL** and **Olson**.

Issue (J):   **Claim 29** obvious over the **Courtney-NPL** and **Brill**.

Issue (K):   **Claim 29** obvious over **Winter, Lipton**, and **Brill**.

Issue (M):   **Claim 29** obvious over **Paek, Qian, Courtney-US**, and **Olson**.

Issue (O):   **Claim 29** obvious over **Paek, Qian, Shotton**, and **Brill**.

Issue (P):   **Claim 29** obvious over **Paek, Qian, Courtney-EP**, and **Olson**.

Issue (Q):   **Claim 29** obvious over **Paek, Qian, Courtney-EP**, and **Brill**.

Issue (R):   **Claim 29** obvious over **Paek, Qian, Courtney-NPL**, and **Brill**.

Issue (S):   **Claim 29** obvious over **Paek, Qian, Courtney-NPL**, and **Olson**.

Issue (C)

Requester proposed that **claim 29** is obvious over the combination of **Courtney-US** and **Olson**. The request and claim charts allege that **Courtney-US** discloses

limitations of **claim 29** and **Olson** teaches limitations of **claim 29**. (*request pgs. 33-38 and claim charts pgs. 68-78*)
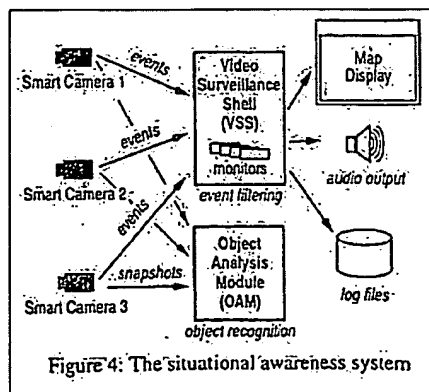
Requester cites both **Courtney-US** and **Olson** for the single limitation of "*detecting first and second objects in a video from a single camera*". (*claim charts pgs. 68-69*) Since requester is citing **Courtney-US** and **Olson** for this single limitation, the examiner considers the combination of **Courtney-US** and **Olson**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Courtney-US** *col.3:65 to col.4:6, col.5:44-47, col.4:29-31, and figures 1 and 5* as disclosing this limitation. For the reader's convenience, *figure 1* of **Courtney-US** is reproduced below.

Fig. 1

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*. For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection over **Courtney-US** and **Olson** has a reasonable likelihood of prevailing because the general application of the combination of **Courtney-US** and **Olson** to <u>**claim 29**</u>, as presented in the request and claim charts, teaches away from the limitation of "*detecting first and second objects in a video from a <u>single</u> camera*" because **Courtney-US**'s *camera 11* is being modified by the <u>multiple</u> smart cameras of **Olson**'s *figure 4* thereby resulting in a system/method for detecting objects in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of <u>**claim 29**</u> because the teaching of **Olson**, as presented in the request and claim charts, teaches away from the claimed invention.

Issue (F)

Requester proposed that <u>**claim 29**</u> is obvious over **Shotton** and **Brill**. The examiner agrees that this obviousness rejection over **Shotton** and **Brill** has a reasonable likelihood of prevailing because the general application of the combination of **Shotton** and **Brill** to <u>**claim 29**</u> in the claim charts appears reasonable. The examiner is able to discern that **Brill** is being cited for the limitations of <u>**claim 8**</u> that are not present in <u>**claims 1-7, 9-13, and 15-28**</u>, for which an anticipation rejection over **Shotton** has a reasonable likelihood of prevailing. (*request pgs. 43-51 and claim charts pgs. 179-198*) Therefore, requester has shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of <u>**claim 29**</u>.
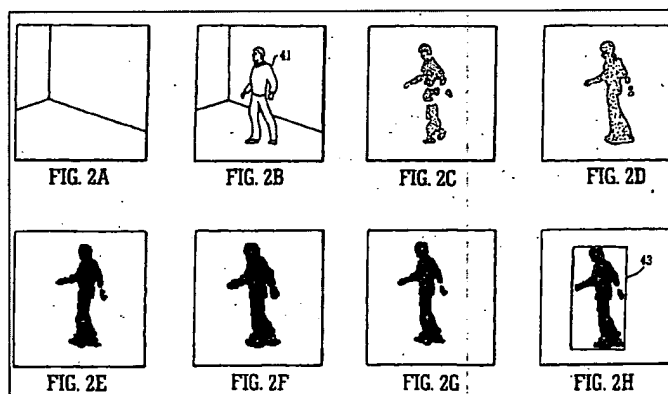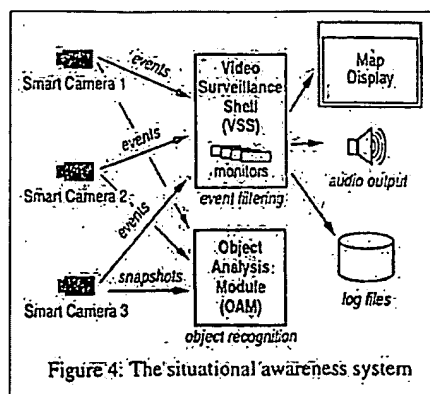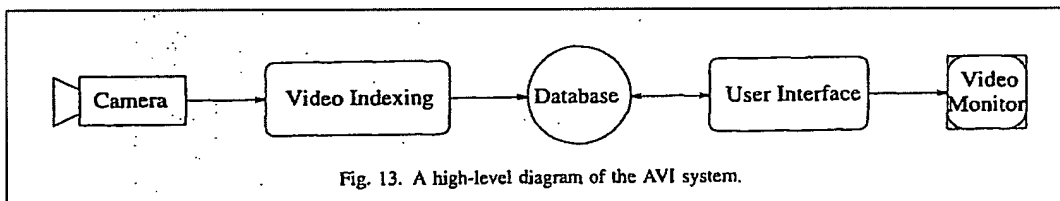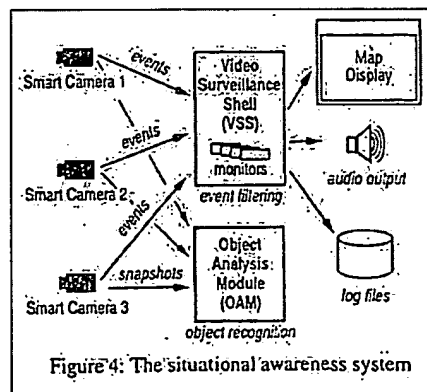
Issue (G)

Requester proposed that **claim 29** is obvious over the combination of **Courtney-EP** and **Olson**. The request and claim charts allege that **Courtney-EP** discloses limitations of **claim 29** and **Olson** teaches limitations of **claim 29**. (*request pgs. 51-57 and claim charts pgs. 462-489*)

As to the limitation of "*detecting first and second objects in a video from a single camera*", requester cites **Courtney-EP** as disclosing this limitation and **Olson** as teaching this limitation. (*claim charts pgs. 462-467*) Since requester is citing **Courtney-EP** and **Olson** for this single limitation, the examiner considers the combination of **Courtney-EP** and **Olson**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Courtney-EP** as disclosing this limitation in ¶¶*[0002], [0017], [0028] to [0034], and figure 2*. For the reader's convenience, *figure 2* of **Courtney-EP** is reproduced below.

FIG. 2A   FIG. 2B   FIG. 2C   FIG. 2D

FIG. 2E   FIG. 2F   FIG. 2G   FIG. 2H

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*. For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

As such, the examiner does <u>not</u> agree that this obviousness rejection over

Courtney-EP and **Olson** has a reasonable likelihood of prevailing because the general

application of the combination of **Courtney-EP** and **Olson** to <u>**claim 29**</u>, as presented in

the request and claim charts, teaches away from the limitation of "*detecting first and*

second objects in a video from a single camera" because **Courtney-EP** is being

modified by the multiple smart cameras of **Olson**'s *figure 4* thereby resulting in a

system/method for detecting objects in videos from <u>multiple</u> cameras and not the

claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable

likelihood of prevailing with respect to this proposed obviousness rejection of <u>**claim 29**</u>

because the teaching of **Olson**, as presented in the request and claim charts, teaches

away from the claimed invention.

<u>Issue (H)</u>

Requester proposed that <u>**claim 29**</u> is obvious over the combination of **Courtney-**

NPL and **Olson**. The request and claim charts allege that **Courtney-NPL** discloses

limitations of <u>**claim 29**</u> and **Olson** teaches limitations of <u>**claim 29**</u>. (*request pgs. 63-64 and*

claim charts pgs. 1259-1277)

As to the limitation of "*detecting first and second objects in a video from a single camera*", requester cites **Courtney-NPL** as disclosing this limitation and **Olson** as teaching this limitation. (*claim charts pgs. 1259-1261*) Since requester is citing **Courtney-NPL** and **Olson** for this single limitation, the examiner considers the combination of **Courtney-NPL** and **Olson**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Courtney-NPL** as disclosing this limitation in *pg. 616, col.2, figure 13, pg. 608, col.2, figures 1-2, pg. 609, cols. 1 and 2, and figure 13*. For the reader's convenience, *figure 13* of **Courtney-NPL** is reproduced below.

Fig. 13. A high-level diagram of the AVI system.

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*. For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

As such, the examiner does <u>not</u> agree that this obviousness rejection over **Courtney-NPL** and **Olson** has a reasonable likelihood of prevailing because the

general application of the combination of **Courtney-NPL** and **Olson** to <u>claim 29</u>, as presented in the request and claim charts, teaches away from the limitation "*detecting first and second objects in a video from a single camera*" because **Courtney-NPL's** *camera* is being modified by the multiple smart cameras of **Olson's** *figure 4* thereby resulting in a system/method for detecting objects in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of **claim 29** because the teaching of **Olson**, as presented in the request and claim charts, teaches away from the claimed invention.

Issue (I)

Requester proposed that <u>claim 29</u> is obvious over **Courtney-EP** and **Brill**. The examiner agrees that this obviousness rejection over **Courtney-EP** and **Brill** has a reasonable likelihood of prevailing because the general application of **Courtney-EP** to **claim 29** in the claim charts appears reasonable (*request pgs. 62-63 and claim charts pgs. 1021-1048*) Also, the examiner is able to discern that this disclosure of **Courtney-EP** combined with **Brill** is reasonably likely to prevail because *figure 1* of **Courtney-EP** and **Brill** disclose identical systems for which the methods employed by the respective systems are likely to be obvious over one another. Therefore, requester has shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of <u>claim 29</u>.

Issue (J)

Requester proposed that <u>claim 29</u> is obvious over **Courtney-NPL** and **Brill**. The

request and claim charts allege that **Courtney-NPL** discloses limitations of <u>claim 29</u>

and **Brill** teaches limitations of <u>claim 29</u>. (*request pgs. 57-62 and claim charts pgs. 728-750*)

Requester cites both **Courtney-NPL** and **Brill** for the single limitation of "*wherein*

the plurality of attributes that are detected are independent of which event is identified".

(*claim charts pgs. 743-746*) Since requester is citing **Courtney-NPL** and **Brill** for this

single limitation, the examiner considers the combination of **Courtney-NPL** and **Brill**, as

presented in the request and claim charts, is required to meet this limitation.

Requester cites **Courtney-NPL** *pg. 610: col.1, pg. 612:cols.1- 2, pg. 614:col.2 to pg.*

615:cols.1-2, and figure 5 as disclosing this limitation and requester cites **Brill** *col.1:43-48,*

col.3:24-27, col.3:41-49, col.4:27-30 as teaching this claim limitation.

However, the motion segmentation, object tracking, hypothetical sequence of 1-D

frames, motion analysis stage, V-object indexing, depositor, and remover as disclosed

by **Courtney-NPL** and modified by **Brill**'s teaching of a "surveillance system

programmed to generate an alarm upon occurrence of a complex event made up of a

series of simple events" does not disclose or suggest "*wherein the plurality of attributes*

that are detected are independent of which event is identified". For at least this reason,

the examiner does <u>not</u> agree that this obviousness rejection over **Courtney-NPL** and

Brill has a reasonable likelihood of prevailing.

Issue (K)

Requester proposed that **claim 29** is obvious over the combination of **Winter,**

Lipton, and **Brill.** For the proposed rejection of **claim 29**, Requester provides a detailed

application of the combination of **Winter, Lipton,** and **Brill** to **claim 29** in the request

(*pgs. 65-73*) and the claim charts. (*pgs. 1511-1536*)

Requester cites **Winter** and **Brill** for the single limitation of *"wherein the plurality*

of attributes that are detected are independent of which event is identified". (*claim charts*

pgs. 1530-1531) Since requester is citing **Winter** and **Brill** for this single limitation, the

examiner considers the combination of **Winter** and **Brill**, as presented in the request

and claim charts, is required to meet this limitation.

Requester cites **Winter** *col.3:23-32 and col.73:56-64* as disclosing this limitation.

For the reader's convenience, these portions of **Winter** are reproduced below.

> According to still a further aspect of the invention, there
> is provided apparatus for analyzing video data, including a
> source of video data and a device for analyzing the video   25
> data provided by the source of video data to detect a first
> predetermined characteristic of the video data by performing
> a first predetermined analysis algorithm, and for performing
> a second predetermined analysis algorithm to detect a sec-
> ond predetermined characteristic of the video data when the   30
> analysis device detects the first predetermined characteristic.

> different characteristics of an incoming video stream. It is
> determined at step 2348 whether a first characteristic is
> present in an incoming stream of video images, by applica-
> tion of a first image analysis algorithm. If at step 2348 it is
> determined that the predetermined characteristic has been   60
> detected by the first analysis algorithm, then step 2350
> follows, at which it is determined whether a second prede-
> termined characteristic has been detected in the same incom-
> ing video stream using a second analysis algorithm. If so,

Requester cites **Brill** _col.1:43-48, col.3:24-27, col.3:41-49, and col.4:27-30_ as

teaching this limitation. For the reader's convenience, these portions of **Brill** are

reproduced below.

> Given a system which detects simple events, one can
> easily create a user interface that enables someone to define
> a complex event by constructing a list of sub-events. After ₄₅
> one or more complex events have been defined, the sub-
> events of complex events defined later can be complex
> events themselves. As an alternative user interface, complex

> The basic system performs three data processing steps for
> every image of a video sequence to recognize events. The ²⁵
> three steps are detecting objects, tracking objects, and ana-
> lyzing the motion graph.

> Finally, to recognize events, the system analyzes the
> motion graph. The preferred, embodiment of the system
> recognizes the following vocabulary of events: ENTER,
> EXIT, REST, MOVE, DEPOSIT, REMOVE, LIGHTS-ON
> and LIGHTS-OUT. These events are examples of the most ₄₅
> common in an office environment where the main interac-
> tion is between people and smaller stationary objects. Other
> examples would be applicable to monitoring outdoors, such
> as a parking lot.

> In the present invention the surveillance system can be
> programmed to only generate an alarm upon the occurrence
> of a complex event made up of a series of simple events.
> ₃₀ Returning to the THEFT example, a better system would

As evidenced by the above disclosures, the combination of **Winter** and **Brill**

does not teach or make obvious _"wherein the plurality of attributes that are detected are_

independent of which event is identified" because the three data processing steps of

Brill's basic system for processing images of a video sequence to recognize events are

not disclosed as independent of ENTER, EXIT, REST, MOVE, DEPOSIT, REMOVE,

LIGHTS-ON, and LIGHT—OUT. As such, for at least this reason, Requester has <u>not</u>

shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection.

Issue (M)

Requester proposed that **claim 29** is obvious over the combination of **Paek**, **Qian**, **Courtney-US**, and **Olson**. For this proposed rejection, requester provides a detailed application of the combination of **Paek**, **Qian**, **Courtney-US**, and **Olson** to **claim 29** in the request (*pgs. 79-81*) and the claim charts. (*pgs. 1758-1782*)

As to the limitation of "*detecting first and second objects in a video from a single camera*", requester cites **Paek**, **Qian**, and **Courtney-US** as disclosing this limitation and **Olson** as teaching this limitation. (*claim charts pgs. 1758-1761*) Since requester is citing **Paek**, **Qian**, and **Courtney-US** and **Olson** for this single limitation, the examiner considers the combination of **Paek**, **Qian**, and **Courtney-US** and **Olson**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col. 17:26-61 and figure 8*. For the reader's convenience **Paek's** *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at *col.2:55 to col.3:8 and figure 1*.

For the reader's convenience, *figure 1* of **Qian** is reproduced below.

Requester cites **Courtney-US** as disclosing this limitation in *col.3:65-col.4:6, col.4:29-31, figures 1 and 5*. For the reader's convenience, *figure 1* of **Courtney-US** is reproduced below.

Fig. 1   10

Requester cites **Olson** as teaching this limitation at _pg. 166, col. 1 and figure 4_.

For the reader's convenience, _figure 4_ of **Olson** is reproduced below.

Figure 4: The situational awareness system

As such, the examiner does <u>not</u> agree that this obviousness rejection over **Paek,**

Qian, Courtney-US, and **Olson** has a reasonable likelihood of prevailing because the

general application of the combination of **Paek, Qian, Courtney-US,** and **Olson** to

claim 29, as presented in the request and claim charts, teaches away from the

limitation of "_detecting first and second objects in a video from a single camera_"

because **Paek, Qian**, and **Courtney-US** is ultimately modified by **Olson**'s multiple smart

cameras of _figure 4_ thereby resulting in a system/method for detecting objects in videos

from <u>multiple</u> cameras and not the claimed <u>single</u> camera. As such, requester has <u>not</u>

shown a reasonable likelihood of prevailing with respect to this proposed obviousness

rejection for at least the reason that the teaching of **Olson**, as presented in the request

and claim charts, teaches away from the claimed invention.

Issue (O)

Requester proposed that **claim 29** is obvious over the combination of **Paek**,

Qian, **Shotton**, and **Brill**. For the proposed rejection of **claim 29**, Requester provides a

detailed application of the combination of **Paek**, **Qian**, **Shotton**, and **Brill** to **claim 29** in

the request (*pgs. 82-84*) and the claim charts. (*pgs. 2031-2067*)

As to the limitation of "*after detecting the plurality of attributes, identifying an*

event that is not one of the detected attributes of the first and second objects by

applying the new user rule to the plurality of detected attributes", requester cites **Paek**

as disclosing this limitation and **Qian, Shotton, and Brill** as teaching this limitation.

(*claim charts pgs. 2049-2057*) Since requester is citing **Paek**, **Qian**, **Shotton**, and **Brill** for

this single limitation, the examiner considers the combination of **Paek**, **Qian**, **Shotton**,

and **Brill**, as presented in the request and claim charts, is required to meet this

limitation.

Requester cites **Paek** as disclosing this limitation at *col. 17:26-61 and figure 8*. For

the reader's convenience **Paek**'s *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at _col.2:55 to col.3:8 and figure 1_.

For the reader's convenience, _figure 1_ of **Qian** is reproduced below.

Requester cites **Shotton** _section 3 and column 3_ as teaching this limitation. For the

reader's convenience, _figure 1_ of **Shotton**, which models how the specific intrinsic

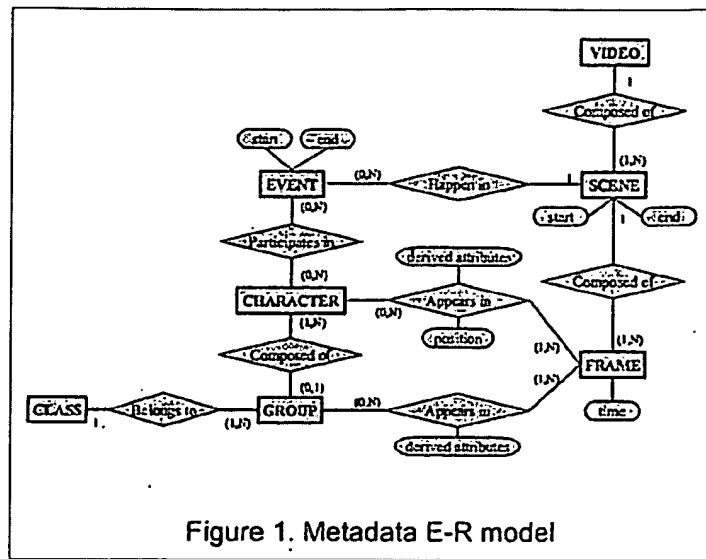metadata data of the video content is stored, is reproduced below.

Figure 1. Metadata E-R model

Requester cites **Brill** _col.4:27-36, col.4:61 to col.5:28, fig. 3, col.6:8-30, col.7:45-54,_

col.8:36-58, and figure 3 as teaching this limitation. For the reader's convenience, _figure 3_

of **Brill** is reproduced below.

FIG. 3

First, **Paek**'s _event and object hierarchy extraction and construction #830_ identifies the

event by the detected attributes _of object extraction and feature extraction #826_.

Consequently, Paek does not disclose the claimed 'identifying an event that is not one

of the detected attributes'.

Second, **Qian** discloses _detected events #22_ that are a result of _texture/color analysis_

_#10_, _motion estimation #8_, and _shot detection #6_. As such, **Qian** does not suggest the

claimed 'identifying an event that is not one of the detected attributes'.

Third, **Shotton**'s metadata model is disclosed as registering "special happenings

in the scenes (events) that can involve characters, and stores specific parameters

defining the who, where, when....happened to whom in these events". (_col.3, 1st ¶ under_

figure 1) In addition, **Shotton**'s _figure 1_ discloses that the identified event takes as an

input the derived attributes. As such, **Shotton** does not disclose or suggest identifying

an event that is not one of the detected attributes, as is claimed.

Fourth, **Brill** discloses detecting a series _of simple events #302_, such as REMOVE

and EXIT, to detect a _complex event #309_, such as THEFT. (_see fig. 3 and col.4:30-35_) As

such, Brill discloses the complex event is detected as a function of detected simple

events REMOVE and EXIT. Therefore, **Brill** does not disclose or suggest identifying an

event that is not one of the detected attributes, as claimed.

For the reasons set forth above, the examiner does not agree that this

obviousness rejection over **Paek, Qian,** and **Shotton** has a reasonable likelihood of

prevailing because the general application of the combination of **Paek, Qian,** and

Shotton to **claim 29**, as presented in the request and claim charts, does not disclose or

make obvious "_after detecting the plurality of attributes, identifying an event that is not_

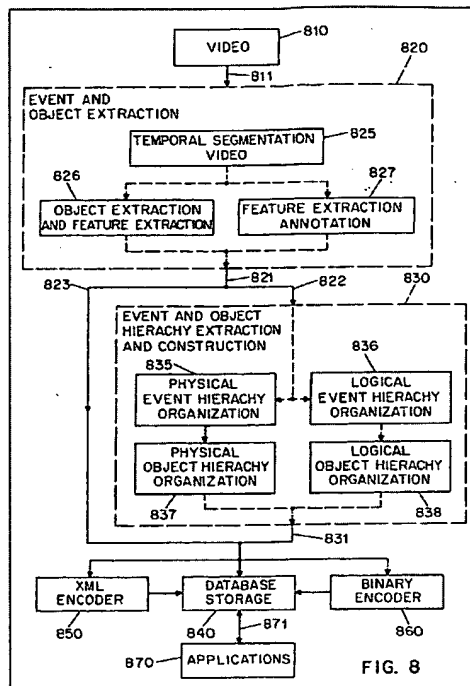_one of the detected attributes of the first and second objects by applying the new user_

rule to the plurality of detected attributes" in combination with the other limitations of the claims.

Issue (P)

Requester proposed that **claim 29** is obvious over the combination of **Paek**, **Qian**, **Courtney-EP**, and **Olson**. The request and claim charts allege that **Paek** discloses limitations of **claim 29** and **Qian**, **Courtney-EP**, and **Olson** teaches limitations of **claim 29**. (*request pgs. 84-85 and claim charts pgs. 2491-2538*)
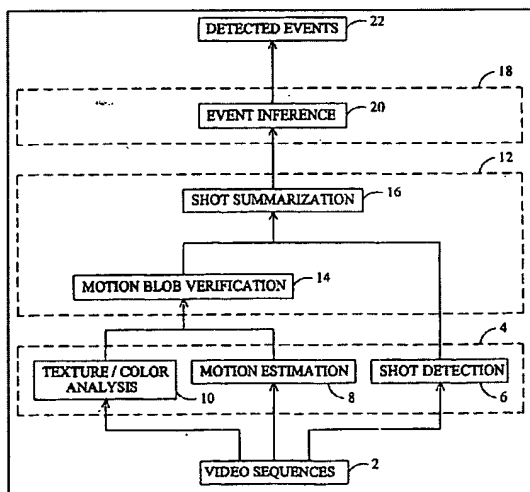
As to the limitation of "*detecting first and second objects in a video from a single camera*", requester cites **Paek** as disclosing this limitation and **Qian, Courtney-EP,** and **Olson** as teaching this limitation. (*claim charts pgs. 2491-2259*) Since requester is citing **Paek, Qian, Courtney-EP**, and **Olson** for this single limitation, the examiner considers the combination of **Paek, Qian, Courtney-EP**, and **Olson**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col. 17:26-61 and figure 8*. For the reader's convenience **Paek's** *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at _col.2:55 to col.3:8 and figure 1_.

For the reader's convenience, _figure 1_ of **Qian** is reproduced below.

Requester cites **Courtney-EP** as disclosing this limitation in ¶¶_[0002], [0017],_

[0028] to [0034, and figure 2. For the reader's convenience, _figure 2_ of **Courtney-EP** is

reproduced below.

FIG. 2A   FIG. 2B   FIG. 2C   FIG. 2D
FIG. 2E   FIG. 2F   FIG. 2G   FIG. 2H

Requester cites **Olson** as teaching this limitation at _pg. 166, col. 1 and figure 4_.

For the reader's convenience, _figure 4_ of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does not agree that this obviousness rejection has a reasonable

likelihood of prevailing because the general application of the combination of **Paek,**

Qian, Courtney-EP, and **Olson** to **claim 29** in the request and claim charts teaches

away from the limitation of "_detecting first and second objects in a video from a single_

camera" because the combination of **Paek, Qian,** and **Courtney-EP** is ultimately being

modified by the multiple smart cameras of **Olson's** _figure 4_ thereby resulting in a

system/method for detecting objects in videos from multiple cameras and not the

claimed single camera. For at least this reason, requester has not shown a reasonable

likelihood of prevailing with respect to this proposed obviousness rejection of **claim 29**

because the teaching of **Olson**, as presented in the request and claim charts, teaches

away from the claimed invention.

Issue (Q)

Requester proposed that **claim 29** is obvious over the combination of **Paek,**

Qian, Courtney-EP, and **Brill**. For the proposed rejection of **claim 29**, Requester

provides a detailed application of the combination of **Paek, Qian, Courtney-EP**, and

Brill to **claim 29** in the request (*pgs. 87-88*) and the claim charts. (*pgs. 3391-3439*)

As to the limitation of "*after detecting the plurality of attributes, identifying an*

event that is not one of the detected attributes of the first and second objects by

applying the new user rule to the plurality of detected attributes", requester cites **Paek**

as disclosing this limitation and **Qian, Courtney-EP, and Brill** as teaching this

limitation. (*claim charts pgs. 3418-3426*) Since requester is citing **Paek, Qian, Courtney-**

EP, and **Brill** for this single limitation, the examiner considers the combination of **Paek,**

Qian, Courtney-EP, and **Brill**, as presented in the request and claim charts, is required

to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col. 17:26-61 and figure 8*. For

the reader's convenience **Paek's** *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at _col.2:55 to col.3:8 and figure 1_.

For the reader's convenience, _figure 1_ of **Qian** is reproduced below.

Requester cites **Courtney-EP** ¶¶_[0069] to [0071], [0090] and figure 9_ as teaching

this limitation. For the reader's convenience, _figure 9_ of **Courtney-EP** is reproduced
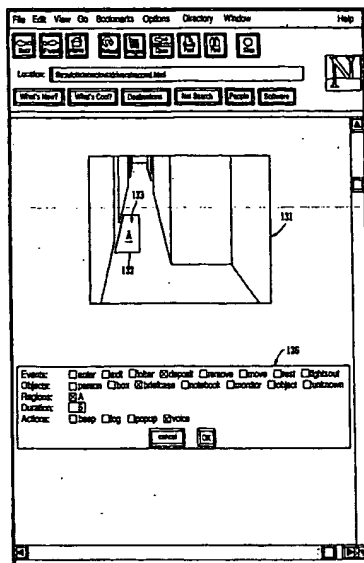
below.

FIG. 9

Requester cites **Brill** *col.4:27-36, col.4:61 to col.5:28, fig. 3, col.6:8-30, col.7:45-54,*

col.8:36-58, and figure 3 as teaching this limitation. For the reader's convenience, *figure 3*

of **Brill** is reproduced below.

FIG. 3

First, **Paek**'s *event and object hierarchy extraction and construction #830* identifies the

event by the detect attributes *of object extraction and feature extraction #826*.

Consequently, Paek does not disclose the claimed 'identifying an event that is <u>not</u> one

of the detected attributes'.

Second, **Qian** discloses *detected events #22* that are a result of *texture/color analysis*

#10, *motion estimation #8*, and *shot detection #6*. As such, **Qian** does not suggest the

claimed 'identifying an event that is <u>not</u> one of the detected attributes'.

Third, **Courtney-EP** discloses *events* such as enter exit, loiter, deposit, rest, and

lights out of *objects* such as person, box, briefcase, notebook, monitor, object, and

unknown but does not disclose or suggest the claimed attributes. As such, **Courtney-**

EP does not disclose or suggest identifying an event that is not one of the detected

attributes, as is claimed.

Fourth, **Brill** discloses detecting a series *of simple events #302*, such as REMOVE

and EXIT, to detect a *complex event #309*, such as THEFT. (*see fig. 3 and col. 4:30-35*) As

such, Brill discloses the complex event is detected as a function of detected simple

events REMOVE and EXIT. Therefore, **Brill** does not disclose or suggest identifying an

event that is not one of the detected attributes, as claimed.

For the reasons set forth above, the examiner does <u>not</u> agree that this

obviousness rejection over the combination of **Paek, Qian, Courtney-EP**, and **Brill** has

a reasonable likelihood of prevailing because the general application of this combination

as to <u>**claim 29**</u>, as presented in the request and claim charts, does not disclose or make

obvious "*after detecting the plurality of attributes, identifying an event that is not one of*

the detected attributes of the first and second objects by applying the new user rule to

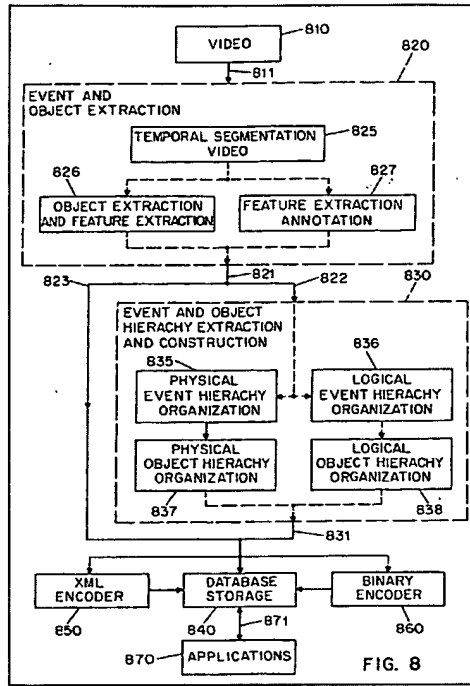*the plurality of detected attributes*".

Issue (R)

Requester proposed that <u>claim 29</u> is obvious over the combination of **Paek,**

Qian, Courtney-NPL, and **Brill**. For the proposed rejection of <u>claim 29</u>, Requester

provides a detailed application of the combination of **Paek, Qian, Courtney-NPL**, and

Brill to <u>claim 29</u> in the request (*pgs. 85-86*) and the claim charts. (*pgs. 2919-2958*)
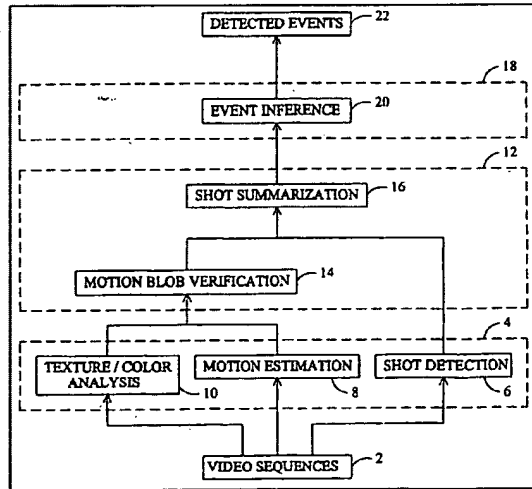
As to the limitation of "*after detecting the plurality of attributes, identifying an*

event that is not one of the detected attributes of the first and second objects by

applying the new user rule to the plurality of detected attributes", requester cites **Paek**

as disclosing this limitation and **Qian, Courtney-NPL, and Brill** as teaching this

limitation. (*claim charts pgs. 2938-2946*) Since requester is citing **Paek, Qian, Courtney-**

NPL, and **Brill** for this single limitation, the examiner considers the combination of

Paek, Qian, Courtney-NPL, and **Brill**, as presented in the request and claim charts, is

required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col. 17:26-61 and figure 8*. For

the reader's convenience **Paek**'s *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at _col.2:55 to col.3:8 and figure 1_.

For the reader's convenience, _figure 1_ of **Qian** is reproduced below.

Requester cites **Courtney-NPL** _pg. 618, cols. 1-2_ as teaching this limitation. For

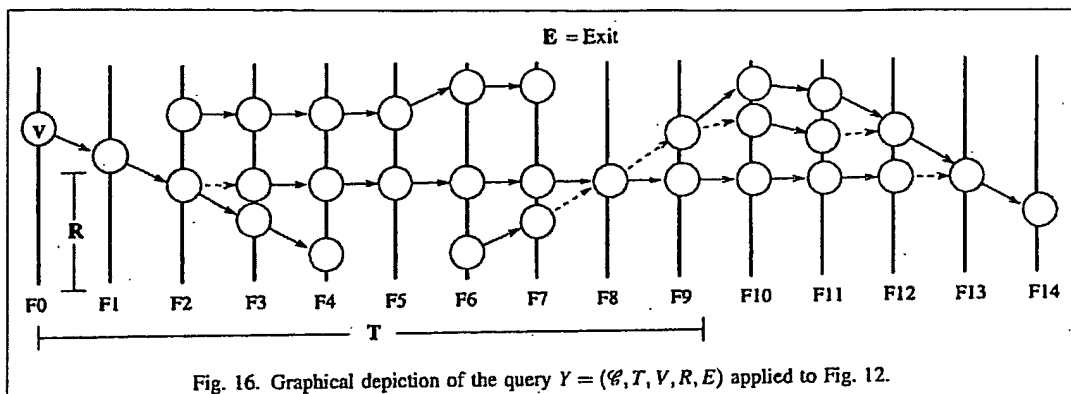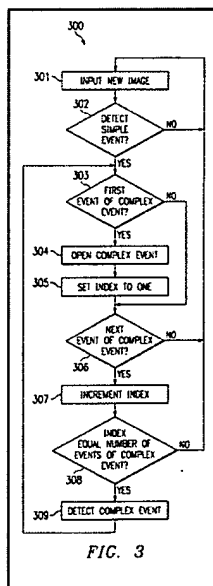the reader's convenience, _figure 16_ of **Courtney-NPL** is reproduced below.

Fig. 16. Graphical depiction of the query $Y = (\mathcal{C}, T, V, R, E)$ applied to Fig. 12.

Requester cites **Brill** _col.4:27-36, col.4:61 to col.5:28, fig. 3, col.6:8-30, col.7:45-54, col.8:36-58, and figure 3_ as teaching this limitation. For the reader's convenience, _figure 3_ of **Brill** is reproduced below.

FIG. 3

First, **Paek**'s _event and object hierarchy extraction and construction #830_ identifies the event by the detected attributes _of object extraction and feature extraction #826_.

Consequently, **Paek** does not disclose the claimed 'identifying an event that is <u>not</u> one of the detected attributes'.

Second, **Qian** discloses _detected events #22_ that are a result of _texture/color analysis_

_#10_, _motion estimation #8_, and _shot detection #6_. As such, **Qian** does not suggest the

claimed 'identifying an event that is <u>not</u> one of the detected attributes'.

Third, **Courtney-NPL**'s query Y=(6, T, V, R, E), where 6 is the video clip, T

specifies a time interval in the clip, V is a V-object within the clip, R a spatial region in

the field of view, and E an object-motion event. (_pg. 618, col.1, 3rd ¶_) The query engine

processes Y by finding all the video subsequences in 6 that satisfy T, V, R, and E. (_pg._

618, col.1, 2nd ¶) As such, **Courtney-NPL** does not disclose or suggest identifying an

event, such as the disclosed 'find any occurrence of this object being removed from this

region of the scene between 8am and 9am' that is not one of the detected attributes, as

claimed, because the event is determined as a function of T, V, R, and E.

Fourth, **Brill** discloses detecting a series _of simple events #302_, such as REMOVE

and EXIT, to detect a _complex event #309_, such as THEFT. (_see fig. 3 and col.4:30-35_) As

such, Brill discloses the complex event is detected as a function of detected simple

events REMOVE and EXIT. Therefore, **Brill** does not disclose or suggest identifying an

event that is not one of the detected attributes, as claimed.

For the reasons set forth above, the combination of **Paek**, **Qian**, **Courtney-NPL**,

and **Brill**, as presented in the request and the claim charts, do not disclose or make

obvious "_after detecting the plurality of attributes, identifying an event that is not one of_

the detected attributes of the first and second objects by applying the new user rule to

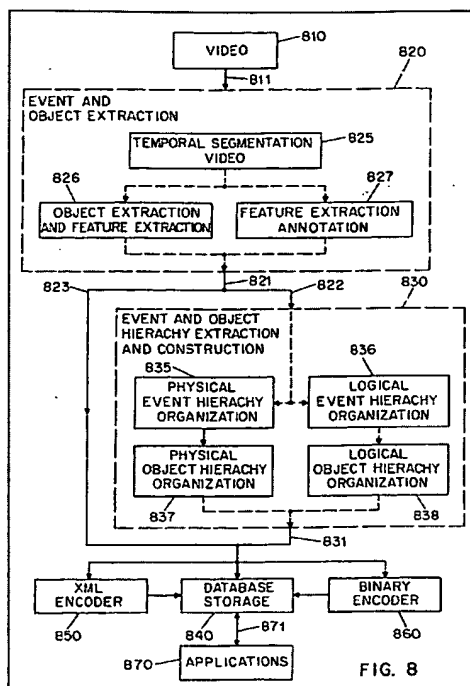_the plurality of detected attributes_" in combination with the other features of the claims.

Consequently, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection.

Issue (S)

Requester proposed that <u>**claim 29**</u> is obvious over the combination of **Paek**, **Qian**, **Courtney-NPL**, and **Olson**. The request and claim charts allege that **Paek** discloses limitations of <u>**claim 29**</u> and **Qian**, **Courtney-NPL**, and **Olson** teaches limitations of <u>**claim 29**</u>. (*request pgs. 88-89 and claim charts pgs. 3788-3821*)
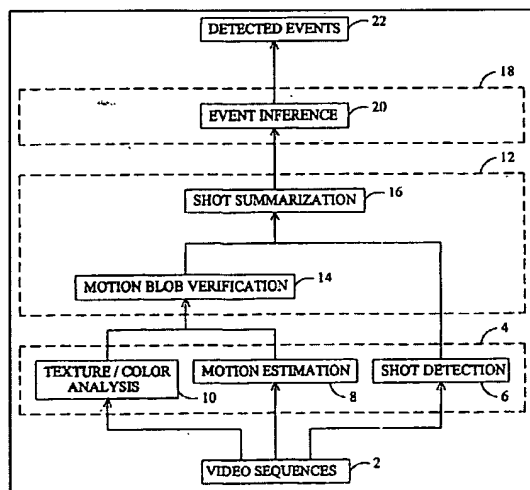
As to the limitation of "*detecting first and second objects in a video from a single camera*", Requester cites **Paek** as disclosing this limitation and **Qian**, **Courtney-NPL**, and **Olson** as teaching this limitation. (*claim charts pgs. 3788-3791*) Since requester is citing **Paek**, **Courtney-NPL**, and **Olson** for this single limitation, the examiner considers the combination of **Paek**, **Courtney-NPL**, and **Olson**, as presented in the request and claim charts, is required to meet the limitation of "*detecting first and second objects in a video from a single camera*".

Requester cites **Paek** as disclosing this limitation at *col. 17:26-61 and figure 8*. For the reader's convenience **Paek's** *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at _col.2:55 to col.3:8 and figure 1_.

For the reader's convenience, _figure 1_ of **Qian** is reproduced below.

Requester cites **Courtney-NPL** as disclosing this limitation in _pg. 616, col.2, figure_
13, pg. 608, col.2, figure 1, pg. 609, cols. 1 and 2, and figure 13. For the reader's

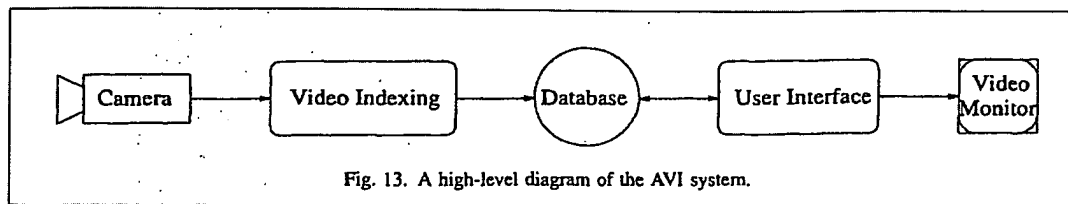convenience, _figure 13_ of **Courtney-NPL** is reproduced below.

Fig. 13. A high-level diagram of the AVI system.

Requester cites **Olson** as teaching this limitation at _pg. 166, col. 1 and figure 4_.

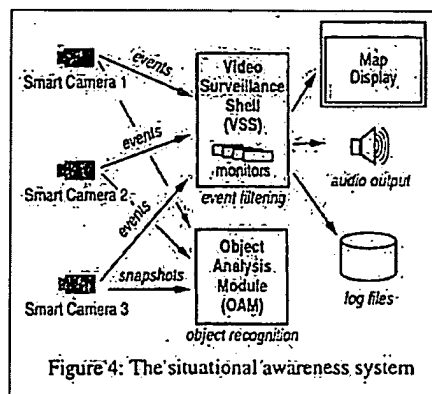For the reader's convenience, _figure 4_ of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection **Paek**, **Qian**,

Courtney-NPL, and **Olson** over has a reasonable likelihood of prevailing because the

general application of the combination of **Paek**, **Qian**, **Courtney-NPL**, and **Olson** to

claim 29 in the request and claim charts teaches away from the limitation of "_detecting_

first and second objects in a video from a single camera" because the combination of

Paek, Qian, and **Courtney-NPL** is ultimately being modified by the <u>multiple</u> smart

cameras of **Olson's** _figure 4_ thereby resulting in a system/method for detecting objects

in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera. For at least this

reason, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to

this proposed obviousness rejection of <u>**claim 29**</u> because the teaching of **Olson**, as

presented in the request and claim charts, teaches away from the claimed invention.

CLAIMS 30-41

For the reasons set forth below, the following issues have been determined to have a reasonable likelihood of prevailing for the identified claims, and will be addressed in the non-final action.

Issue (F):   **Claims 30-41** obvious over **Shotton** and **Brill**.

Issue (I):   **Claims 30-41** obvious over **Courtney-EP** and **Brill**.

For the reasons set forth below, the following issues have been determined to NOT have a reasonable likelihood of prevailing for the identified claims, and will NOT be addressed in the non-final action.

Issue (C):   **Claims 30-41** obvious over **Courtney-US** and **Olson**.

Issue (G):   **Claims 30-41** obvious over **Courtney-EP** and **Olson**.

Issue (H):   **Claims 30-41** obvious over **Courtney-NPL** and **Olson**.

Issue (J):   **Claims 30-41** obvious over the **Courtney-NPL** and **Brill**.

Issue (K):   **Claims 30-41** obvious over **Winter, Lipton**, and **Brill**.

Issue (M):   **Claims 30-41** obvious over **Paek, Qian, Courtney-US**, and **Olson**.

Issue (O):   **Claims 30-41** obvious over **Paek, Qian, Shotton**, and **Brill**.

Issue (P):   **Claims 30-41** obvious over **Paek, Qian, Courtney-EP**, and **Olson**.

Issue (Q):   **Claims 30-41** obvious over **Paek, Qian, Courtney-EP**, and **Brill**.

Issue (R):   **Claims 30-41** obvious over **Paek, Qian, Courtney-NPL**, and **Brill**.

Issue (S):   **Claims 30-41** obvious over **Paek, Qian, Courtney-NPL**, and **Olson**.

Issue (C)

Requester proposed that **claims 30-41** are obvious over the combination of **Courtney-US** and **Olson**. The request and claim charts allege that **Courtney-US**
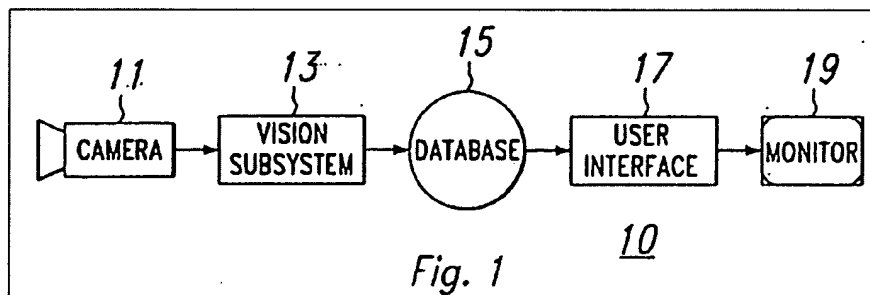
discloses limitations of **claims 30-41** and **Olson** teaches limitations of **claims 30-41**.

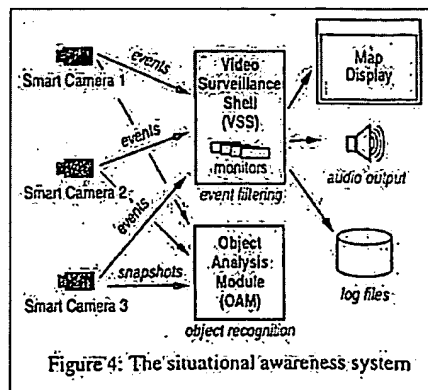(*request pgs. 33-38 and claim charts pgs. 79-103*)

Requester cites both **Courtney-US** and **Olson** for the single limitation of "*means for detecting first and second objects in a video from a single camera*". (*claim charts pgs. 79-80*) Since requester is citing **Courtney-US** and **Olson** for this single limitation, the examiner considers the combination of **Courtney-US** and **Olson**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Courtney-US** *col.3:65 to col.4:6, col.5:44-47, col.4:29-31, and figures 1 and 5* as disclosing this limitation. For the reader's convenience, *figure 1* of **Courtney-US** is reproduced below.

Fig. 1

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection over **Courtney-US**

and **Olson** has a reasonable likelihood of prevailing because the general application of

the combination of **Courtney-US** and **Olson** to <u>claims 30-41</u>, as presented in the

request and claim charts, teaches away from the limitation of "*means for detecting first*

and second objects in a video from a single camera" because **Courtney-US**'s *camera 11*

is being modified by the <u>multiple</u> smart cameras of **Olson**'s *figure 4* thereby resulting in

a system/method for detecting objects in videos from <u>multiple</u> cameras and not the

claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable

likelihood of prevailing with respect to this proposed obviousness rejection of <u>claims 30-</u>

<u>41</u> because the teaching of **Olson**, as presented in the request and claim charts,

teaches away from the claimed invention.

Issue (F)

Requester proposed that <u>claims 30-41</u> are obvious over **Shotton** and **Brill**. The

examiner agrees that this obviousness rejection over **Shotton** and **Brill** has a

reasonable likelihood of prevailing because the general application of the combination

of **Shotton** and **Brill** to <u>claims 30-41</u> in the claim charts appears reasonable. (*request*

pgs. 43-51 and claim charts pgs. 199-241) The examiner is able to discern that **Brill** is

being cited for the limitations of <u>claim 1-7, 9-13, and 15-28</u> that are not present in

<u>claims 1-7, 9-13, and 15-28</u>, for which an anticipation rejection over **Shotton** has a

reasonable likelihood of prevailing. (*request pgs. 43-51 and claim charts pgs. 199-41*)

Therefore, requester has shown a reasonable likelihood of prevailing with respect to this
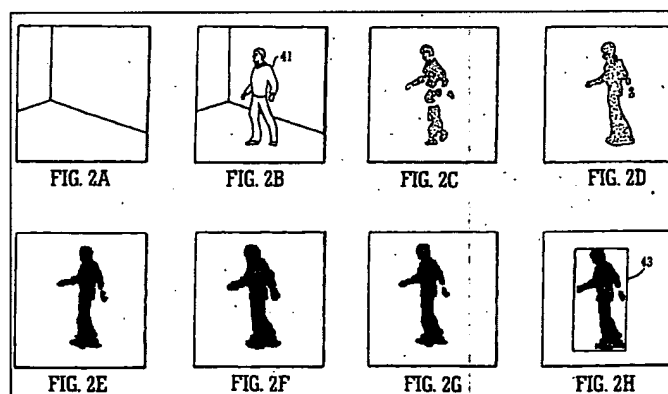
proposed obviousness rejection of <u>claims 30-41</u>.

Issue (G)

Requester proposed that **claims 30-41** are obvious over the combination of

Courtney-EP and **Olson**. The request and claim charts allege that **Courtney-EP**

discloses limitations of **claims 30-41** and **Olson** teaches limitations of **claims 30-41**.

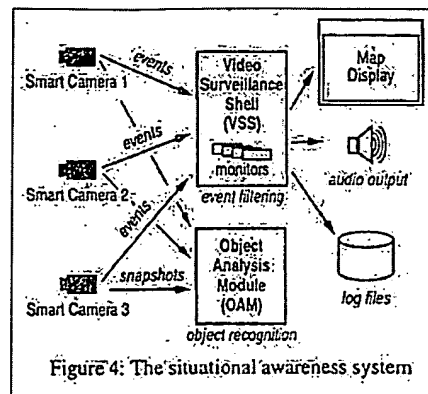(*request pgs. 51-57 and claim charts pgs. 490-547*)

As to the limitation of "*means for detecting first and second objects in a video*

from a single camera", requester cites **Courtney-EP** as disclosing this limitation and

Olson as teaching this limitation. (*claim charts pgs. 490-495*) Since requester is citing

Courtney-EP and **Olson** for this single limitation, the examiner considers the

combination of **Courtney-EP** and **Olson**, as presented in the request and claim charts,

is required to meet this limitation.

Requester cites **Courtney-EP** as disclosing this limitation in ¶¶*[0002], [0017],*

[0028] to [0034], and figure 2. For the reader's convenience, *figure 2* of **Courtney-EP** is

reproduced below.

FIG. 2A FIG. 2B FIG. 2C FIG. 2D
FIG. 2E FIG. 2F FIG. 2G FIG. 2H

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

For the reader's convenience, *figure 4* of **Olson** is reproduced below.

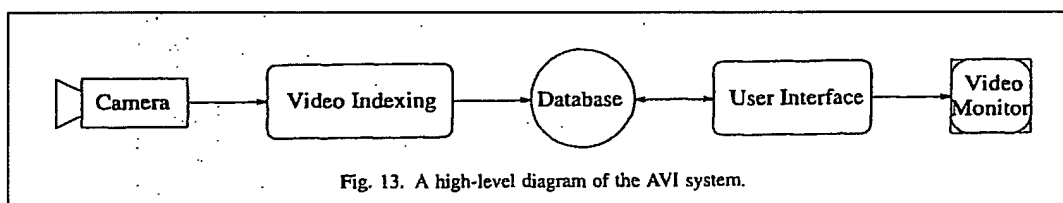Figure 4: The situational awareness system

The examiner does not agree that this obviousness rejection over **Courtney-EP** and **Olson** has a reasonable likelihood of prevailing because the general application of the combination of **Courtney-EP** and **Olson** to **claims 30-41**, as presented in the request and claim charts, teaches away from the limitation of "*means for detecting first and second objects in a video from a single camera*" because **Courtney-EP** is being modified by the multiple smart cameras of **Olson**'s *figure 4* thereby resulting in a system/method for detecting objects in videos from multiple cameras and not the claimed single camera. For at least this reason, requester has not shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of **claims 30-41** because the teaching of **Olson**, as presented in the request and claim charts, teaches away from the claimed invention.
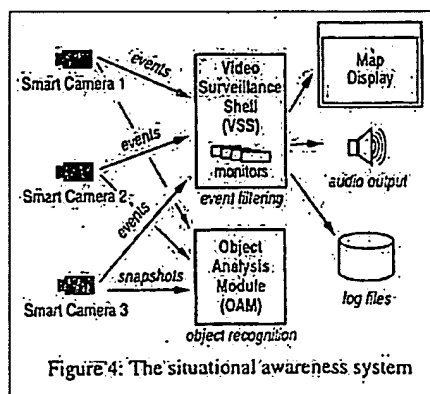
Issue (H)

Requester proposed that **claims 30-41** are obvious over the combination of **Courtney-NPL** and **Olson**. The request and claim charts allege that **Courtney-NPL** discloses limitations of **claims 30-41** and **Olson** teaches limitations of **claims 30-41**. (*request pgs. 63-64 and claim charts pgs. 1278-1314*)

As to the limitation of "*means for detecting first and second objects in a video*

from a single camera", requester cites **Courtney-NPL** as disclosing this limitation and

Olson as teaching this limitation. (*claim charts pgs. 1278-1280*) Since requester is citing

Courtney-NPL and **Olson** for this single limitation, the examiner considers the

combination of **Courtney-NPL** and **Olson**, as presented in the request and claim

charts, is required to meet this limitation.

Requester cites **Courtney-NPL** as disclosing this limitation in *pg. 616, col.2, figure*

13, pg. 608, col.2, figures 1-2, pg. 609, cols. 1 and 2, and figure 13. For the reader's

convenience, *figure 13* of **Courtney-NPL** is reproduced below.

Fig. 13. A high-level diagram of the AVI system.

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection over **Courtney-NPL**

and **Olson** has a reasonable likelihood of prevailing because the general application of

the combination of **Courtney-NPL** and **Olson** to <u>**claims 30-41**</u>, as presented in the request and claim charts, teaches away from the limitation "*means for detecting first and second objects in a video from a single camera*" because **Courtney-NPL's** <u>*camera*</u> is being modified by the multiple smart cameras of **Olson's** *figure 4* thereby resulting in a system/method for detecting objects in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of <u>**claims 30-41**</u> because the teaching of **Olson**, as presented in the request and claim charts, . teaches away from the claimed invention.

Issue (I)

Requester proposed that <u>**claims 30-41**</u> are obvious over **Courtney-EP** and **Brill**. The examiner agrees that this obviousness rejection over **Courtney-EP** and **Brill** has a reasonable likelihood of prevailing because the general application of **Courtney-EP** to <u>**claims 30-41**</u> in the claim charts appears reasonable. (*request pgs. 62-63 and claim charts pgs. 1049-1107*) Also, the examiner is able to discern that this disclosure of **Courtney-EP** combined with **Brill** is reasonably likely to prevail because *figure 1* of **Courtney-EP** and **Brill** disclose identical systems for which the methods employed by the respective systems are likely to be obvious over one another. Therefore, requester has shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of <u>**claims 30-41**</u>.

Issue (J)

Requester proposed that **claims 30-41** are obvious over **Courtney-NPL** and

Brill. The request and claim charts allege that **Courtney-NPL** discloses limitations of

claims 30-41 and **Brill** teaches limitations of **claims 30-41**. (*request pgs. 57-62 and claim*

charts pgs. 751-795)

Requester cites both **Courtney-NPL** and **Brill** for the single limitation of "*means*

for identifying the event independent of when the attributes are stored in memory, the

event not being one of the detected attributes". (*claim charts pgs. 763-766*) Since

requester is citing both **Courtney-NPL** and **Brill** for this single limitation, the examiner

considers the combination of **Courtney-NPL** and **Brill**, as presented in the request and

claim charts, is required to meet this limitation.

Requester cites **Courtney-NPL** *pg. 610: col.1, pg. 612:cols.1- 2, pg. 614:col.2 to pg.*

615:cols.1-2, and figure 5 as disclosing this limitation and requester cites **Brill** *col.1:43-48,*

col.3:24-27, col.3:41-49, col.4:27-30 as teaching this claim limitation.

However, the motion segmentation, object tracking, hypothetical sequence of 1-D

frames, motion analysis stage, V-object indexing, depositor, and remover as disclosed

by **Courtney-NPL** and modified by **Brill**'s teaching of a "surveillance system

programmed to generate an alarm upon occurrence of a complex event made up of a

series of simple events" does not disclose or suggest that these stages of **Courtney-**

NPL are independent of the identified complex event made up of simple events. For at

least this reason, the examiner does not agree that this obviousness rejection over

Courtney-NPL and **Brill** has a reasonable likelihood of prevailing.

Issue (K)

Requester proposed that **claims 30-41** are obvious over the combination of

Winter, Lipton, and **Brill**. For the proposed rejection of **claims 30-41**, Requester

provides a detailed application of the combination of **Winter**, **Lipton**, and **Brill** to **claims**

30-41 in the request (*pgs. 65-73*) and the claim charts. (*pgs. 1537-1586*)

Requester cites **Winter** and **Brill** for the single limitation of *"means for identifying*

the event independent of when the attributes are stored in memory, the event not being

one of the detected attributes". (*claim charts pgs. 1554-1555*) Since requester is citing

Winter and **Brill** for this single limitation, the examiner considers the combination of

Winter and **Brill**, as presented in the request and claim charts, is required to meet this

limitation.

Requester cites **Winter** *col. 3:23-32 and col. 73:56-64* as disclosing this limitation.

For the reader's convenience, these portions of **Winter** are reproduced below.

> According to still a further aspect of the invention, there is provided apparatus for analyzing video data, including a source of video data and a device for analyzing the video   25 data provided by the source of video data to detect a first predetermined characteristic of the video data by performing a first predetermined analysis algorithm, and for performing a second predetermined analysis algorithm to detect a second predetermined characteristic of the video data when the   30 analysis device detects the first predetermined characteristic.

> different characteristics of an incoming video stream. It is determined at step **2348** whether a first characteristic is present in an incoming stream of video images, by application of a first image analysis algorithm. If at step **2348** it is determined that the predetermined characteristic has been   60 detected by the first analysis algorithm, then step **2350** follows, at which it is determined whether a second predetermined characteristic has been detected in the same incoming video stream using a second analysis algorithm. If so,

Requester cites **Brill** *col.1:43-48, col.3:24-27, col.3:41-49, and col.4:27-30* as

teaching this limitation. For the reader's convenience, these portions of **Brill** are

reproduced below.

> Given a system which detects simple events, one can easily create a user interface that enables someone to define a complex event by constructing a list of sub-events. After 45 one or more complex events have been defined, the sub-events of complex events defined later can be complex events themselves. As an alternative user interface, complex

> The basic system performs three data processing steps for every image of a video sequence to recognize events. The 25 three steps are detecting objects, tracking objects, and analyzing the motion graph.

> Finally, to recognize events, the system analyzes the motion graph. The preferred, embodiment of the system recognizes the following vocabulary of events: ENTER, EXIT, REST, MOVE, DEPOSIT, REMOVE, LIGHTS-ON and LIGHTS-OUT. These events are examples of the most 45 common in an office environment where the main interaction is between people and smaller stationary objects. Other examples would be applicable to monitoring outdoors, such as a parking lot.

> In the present invention the surveillance system can be programmed to only generate an alarm upon the occurrence of a complex event made up of a series of simple events. 30 Returning to the THEFT example, a better system would

As evidenced by the above disclosures, the combination of **Winter** and **Brill**

does not teach or make obvious *"means for identifying the event independent of when*

the attributes are stored in memory, the event not being one of the detected attributes"

because the three data processing steps of **Brill**'s basic system for processing images

of a video sequence to recognize events are not disclosed as independent of ENTER,

EXIT, REST, MOVE, DEPOSIT, REMOVE, LIGHTS-ON, and LIGHT—OUT. As such,

for at least this reason, Requester has <u>not</u> shown a reasonable likelihood of prevailing

with respect to this proposed obviousness rejection.

Issue (M)

Requester proposed that **claims 30-41** are obvious over the combination of

Paek, **Qian**, **Courtney-US**, and **Olson**. For the proposed rejection of **claim 29**,   .

Requester provides a detailed application of the combination of **Paek**, **Qian**, **Courtney-**

US, and **Olson** to **claims 30-41** in the request (*pgs. 79-81*) and the claim charts. (*pgs.*

1783-1836)

As to the limitation of "*means for detecting first and second objects in a video*

from a single camera", Requester cites **Paek** as disclosing this limitation at and **Qian**,

Courtney-US, and **Olson** as teaching this limitation. (*pgs. 1783-1786*) Since requester is

citing **Paek**, **Qian**, **Courtney-US**, and **Olson** for this single limitation, the examiner

considers the combination of **Paek**, **Qian**, **Courtney-US**, and **Olson**, as presented in

the request and claim charts, is required to meet this limitation.

As set forth above as to Issue **(M)**'s proposed rejection of **claim 8**, the examiner

does <u>not</u> agree that this obviousness rejection over **Paek, Qian, Courtney-US,** and

Olson has a reasonable likelihood of prevailing because the general application of the

combination of **Paek, Qian, Courtney-US,** and **Olson** to **claims 30-41**, as presented in

the request and claim charts teaches away from the limitation of "*means for detecting*

first and second objects in a video from a single camera" because the combination of

Paek, Qian, Courtney-US is ultimately modified by **Olson**'s multiple smart cameras of

figure 4 thereby resulting in a system/method for detecting objects in videos from

multiple cameras and not the claimed single camera. As such, requester has not shown

a reasonable likelihood of prevailing with respect to this proposed obviousness rejection

of **claims 30-41** for at least the reason that the teaching of **Olson**, as presented in the

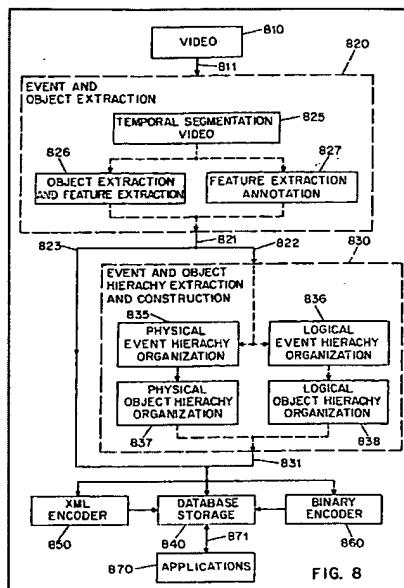request and claim charts, teaches away from the claimed invention.

Issue (O)

Requester proposed that **claims 30-41** is obvious over the combination of **Paek**,

Qian, **Shotton**, and **Brill**. For the proposed rejection of **claims 30-41**, Requester

provides a detailed application of the combination of **Paek**, **Qian**, **Shotton**, and **Brill** to

claims 30-41 in the request (*pgs. 82-84*) and the claim charts. (*pgs. 2068-2138*)

As to the limitation of "*means for identifying an event independent of when the*

attributes are stored in memory, the event not being one of the detected attributes",

requester cites **Paek** as disclosing this limitation and **Qian, Shotton, and Brill** as

teaching this limitation. (*claim charts pgs. 2090-2094*) Since requester is citing **Paek**,

Qian, **Shotton**, and **Brill** for this single limitation, the examiner considers the

combination of **Paek**, **Qian**, **Shotton**, and **Brill**, as presented in the request and claim
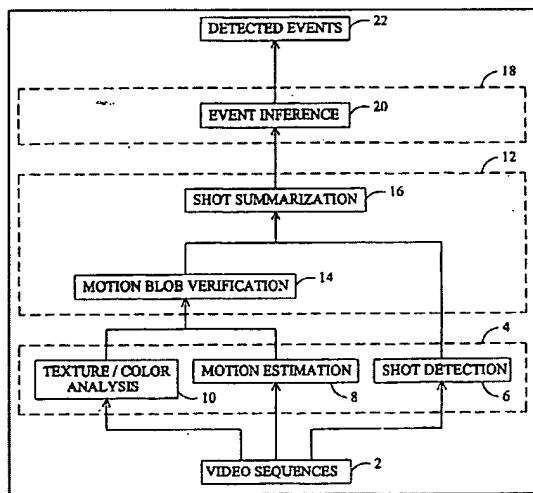
charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col.17:26-61 and figure 8*. For

the reader's convenience **Paek**'s *figure 8* is reproduced below.
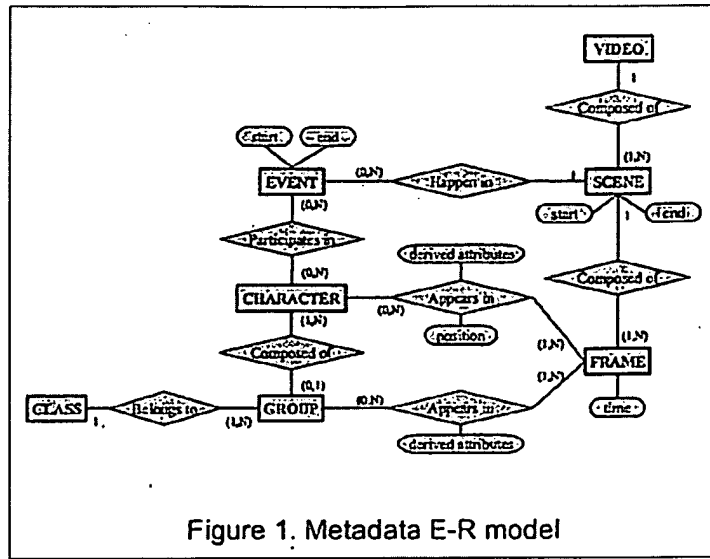
FIG. 8

Requester cites **Qian** as teaching this limitation at _col.2:55 to col.3:8 and figure 1_.
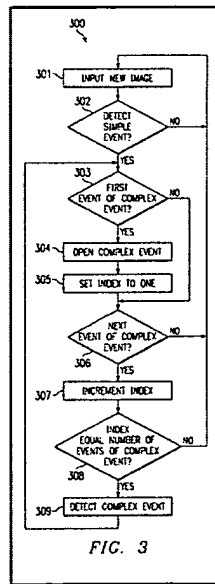
For the reader's convenience, _figure 1_ of **Qian** is reproduced below.

Requester cites **Shotton** _section 3 and column 3_ as teaching this limitation. For the

reader's convenience, _figure 1_ of **Shotton**, which models how the specific intrinsic

metadata data of the video content is stored, is reproduced below.

Figure 1. Metadata E-R model

Requester cites **Brill** _col.4:27-36, col.4:61 to col.5:28, fig. 3, col.6:8-30, col.7:45-54,_

col.8:36-58, and figure 3 as teaching this limitation. For the reader's convenience, _figure 3_

of **Brill** is reproduced below.

FIG. 3

First, **Paek**'s _event and object hierarchy extraction and construction #830_ identifies the

event by the detected attributes _of object extraction and feature extraction #826._

Consequently, **Paek** does not disclose the claimed 'identifying an event that is <u>not</u> one of the detected attributes'.

Second, **Qian** discloses *detected events #22* that are a result of *texture/color analysis #10*, *motion estimation #8*, and *shot detection #6*. As such, **Qian** does not suggest the claimed 'identifying an event that is <u>not</u> one of the detected attributes'.

Third, **Shotton**'s metadata model is disclosed as registering "special happenings in the scenes (events) that can involve characters, and stores specific parameters defining the who, where, when....happened to whom in these events". (*col.3, 1st ¶ under figure 1*) In addition, **Shotton**'s *figure 1* discloses that the identified event takes as an input the derived attributes. As such, **Shotton** does not disclose or suggest identifying an event that is not one of the detected attributes, as is claimed.

Fourth, **Brill** discloses detecting a series *of simple events #302*, such as REMOVE and EXIT, to detect a *complex event #309*, such as THEFT. (*see fig. 3 and col.4:30-35*) As such, **Brill** discloses the complex event is detected as a function of detected simple events REMOVE and EXIT. Therefore, **Brill** does not disclose or suggest identifying an event that is not one of the detected attributes, as claimed.

For the reasons set forth above, the examiner does <u>not</u> agree that this obviousness rejection over **Paek, Qian, Shotton,** and **Brill** has a reasonable likelihood of prevailing because the general application of the combination of **Paek, Qian, Shotton,** and **Brill** to <u>claims 30-41</u>, as presented in the request and claim charts, does not disclose or make obvious "*means for identifying an event independent of when the*
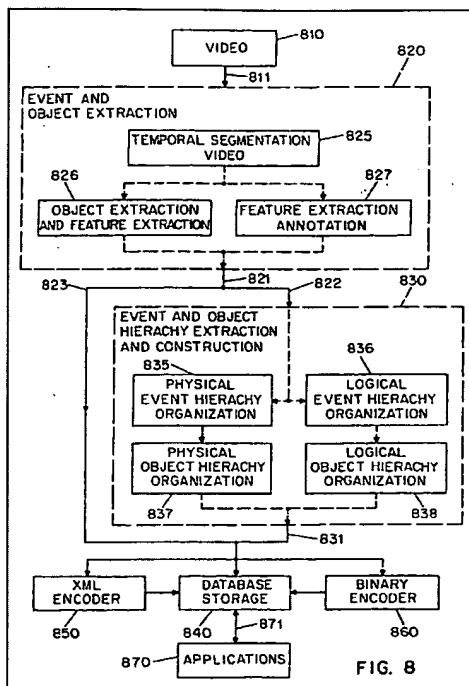
attributes are stored in memory, the event not being one of the detected attributes" in combination with the other limitations of the claims.

Issue (P)

Requester proposed that **claims 30-41** are obvious over the combination of **Paek**, **Qian**, **Courtney-EP**, and **Olson**. The request and claim charts allege that **Paek** discloses limitations of **claims 30-41** and **Qian**, **Courtney-EP**, and **Olson** teaches limitations of **claims 30-41**. (*request pgs. 84-85 and claim charts pgs. 2539-2627*)

As to the limitation of *"means for detecting first and second objects in a video from a single camera"*, requester cites **Paek** as disclosing this limitation and **Qian**, **Courtney-EP**, and **Olson** as teaching this limitation. (*claim charts pgs. 2539-2547*) Since requester is citing **Paek**, **Qian**, **Courtney-EP**, and **Olson** for this single limitation, the examiner considers the combination of **Paek**, **Qian**, **Courtney-EP**, and **Olson**, as presented in the request and claim charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col.17:26-61 and figure 8*. For the reader's convenience **Paek's** *figure 8* is reproduced below.
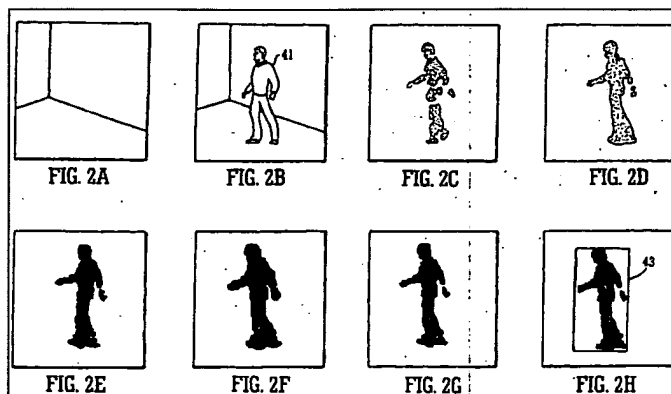
FIG. 8

Requester cites **Qian** as teaching this limitation at _col.2:55 to col.3:8 and figure 1_.

For the reader's convenience, _figure 1_ of **Qian** is reproduced below.
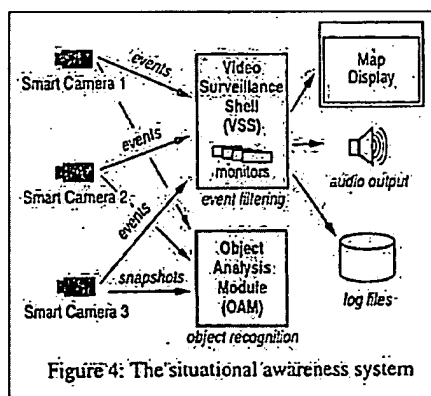

Requester cites **Courtney-EP** as disclosing this limitation in ¶¶_[0002], [0017],_

[0028] to [0034, and figure 2. For the reader's convenience, _figure 2_ of **Courtney-EP** is

reproduced below.

FIG. 2A   FIG. 2B   FIG. 2C   FIG. 2D

FIG. 2E   FIG. 2F   FIG. 2G   FIG. 2H

Requester cites **Olson** as teaching this limitation at _pg. 166, col. 1 and figure 4_.

For the reader's convenience, _figure 4_ of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness has a reasonable likelihood

of prevailing because the general application of the combination of **Paek**, **Qian**,

Courtney-EP, and **Olson** to <u>**claims 30-41**</u> in the request and claim charts teaches

away from the *"means for detecting first and second objects in a video from a single*

camera" because the combination of **Paek**, **Qian,** and **Courtney-EP** is ultimately being

modified by the <u>multiple</u> smart cameras of **Olson's** _figure 4_ thereby resulting in a

system/method for detecting objects videos from <u>multiple</u> cameras and not the claimed

<u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable

likelihood of prevailing with respect to this proposed obviousness rejection of <u>**claims 30-**</u>
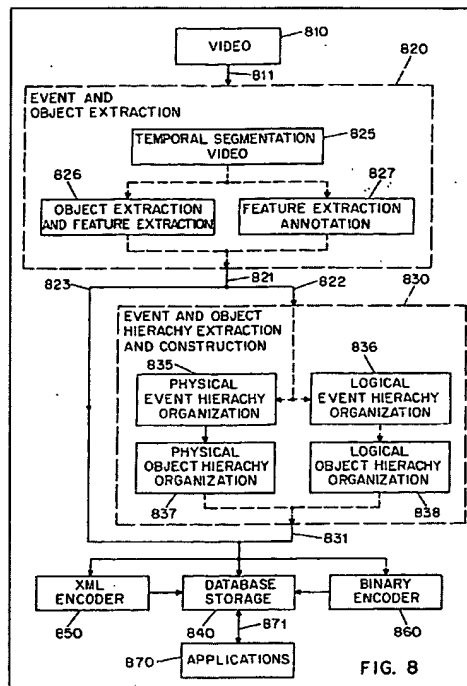
41 because the teaching of **Olson**, as presented in the request and claim charts,

teaches away from the claimed invention.

Issue (Q)

Requester proposed that <u>**claims 30-41**</u> are obvious over the combination of

Paek, Qian, Courtney-EP, and **Brill**. For the proposed rejection of <u>**claims 30-41**</u>,

Requester provides a detailed application of the combination of **Paek, Qian, Courtney-**

EP, and **Brill** to <u>**claims 30-41**</u> in the request (*pgs. 87-88*) and the claim charts. (*pgs. 3440-*

3530)

As to the limitation "*means for identifying an event of the first object interacting*

with the second object by applying a new selected user rule to the plurality of attributes

stored in memory", requester cites **Paek** as disclosing this limitation and **Courtney-EP,**

Qian, Brill as teaching this limitation. (*claim charts pgs. 3465-3473*) Since requester is

citing **Paek**, **Qian, Courtney-EP**, and **Brill** for this single limitation, the examiner

considers the combination of **Paek**, **Qian, Courtney-EP**, and **Brill**, as presented in the

request and claim charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col.17:26-61 and figure 8*. For

the reader's convenience **Paek**'s *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at _col. 2:55 to col. 3:8 and figure 1_.

For the reader's convenience, _figure 1_ of **Qian** is reproduced below.

Requester cites **Courtney-EP** ¶¶_[0069] to [0071], [0090] and figure 9_ as teaching

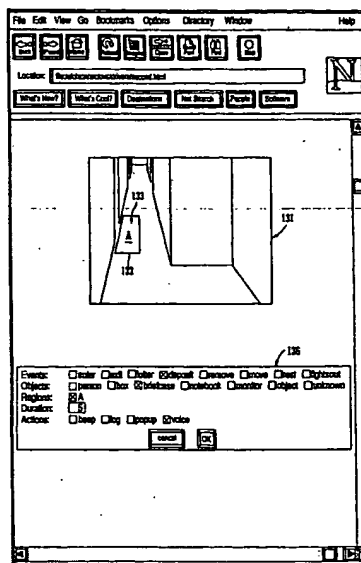this limitation. For the reader's convenience, _figure 9_ of **Courtney-EP** is reproduced

below.

FIG. 9

Requester cites **Brill** *col.4:27-36, col.4:61 to col.5:28, fig. 3, col.6:8-30, col.7:45-54, col.8:36-58, and figure 3* as teaching this limitation. For the reader's convenience, *figure 3* of **Brill** is reproduced below.

First, **Paek**'s *event and object hierarchy extraction and construction #830* identifies the event by the detect attributes *of object extraction and feature extraction #826*. Consequently, Paek does not disclose the claimed 'identifying an event that is <u>not</u> one of the detected attributes'.

Second, **Qian** discloses *detected events #22* that are a result of *texture/color analysis #10*, *motion estimation #8*, and *shot detection #6*. As such, **Qian** does not suggest the claimed 'identifying an event that is <u>not</u> one of the detected attributes'.

Third, **Courtney-EP** discloses *events* such as enter exit, loiter, deposit, rest, and lights out of *objects* such as person, box, briefcase, notebook, monitor, object, and unknown but does not disclose or suggest the claimed attributes. As such, **Courtney-**

EP does not disclose or suggest identifying an event that is not one of the detected

attributes, as is claimed.

Fourth, **Brill** discloses detecting a series *of simple events #302*, such as REMOVE

and EXIT, to detect a *complex event #309*, such as THEFT. (*see fig. 3 and col.4:30-35*) As

such, Brill discloses the complex event is detected as a function of detected simple

events REMOVE and EXIT. Therefore, **Brill** does not disclose or suggest identifying an

event that is not one of the detected attributes, as claimed.

For the reasons set forth above, the examiner does <u>not</u> agree that this

obviousness rejection over the combination of **Paek, Qian, Courtney-EP**, and **Brill** has

a reasonable likelihood of prevailing because the general application of this combination

as to **claims 30-41**, as presented in the request and claim charts, does not disclose or

make obvious "*means for identifying an event of the first object interacting with the*

second object by applying a new selected user rule to the plurality of attributes stored in
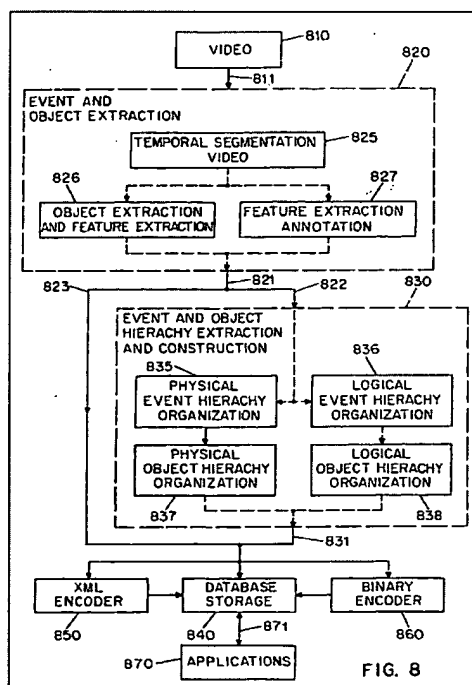
memory".

Issue (R)

Requester proposed that **claims 30-41** are obvious over the combination of

Paek, Qian, Courtney-NPL, and **Brill**. For the proposed rejection of **claims 30-41**,

requester provides a detailed application of the combination of **Paek, Qian, Courtney-**

NPL, and **Brill** to **claims 30-41** in the request (*pgs. 85-86*) and the claim charts. (*pgs.*

2959-3031)

As to the limitation of "*means for identifying an event of the first object interacting*

with the second object by applying a new selected user rule to the plurality of attributes
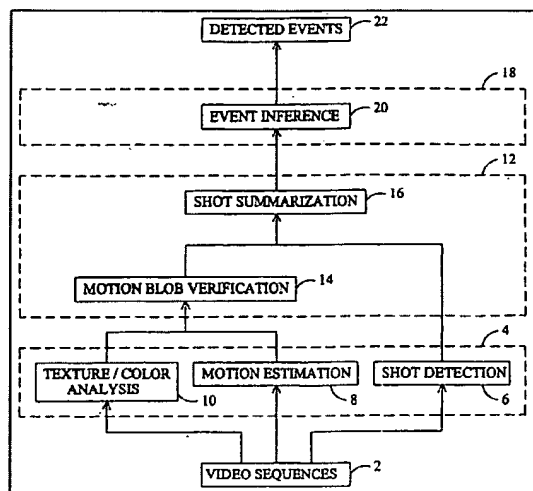
stored in memory", requester cites **Paek** as disclosing this limitation and **Qian,**

Courtney-NPL, and **Brill** as teaching this limitation. (*claim charts pgs. 2974-2983*) Since

requester is citing **Paek**, **Qian**, **Courtney-NPL**, and **Brill** for this single limitation, the

examiner considers the combination of **Paek**, **Qian**, **Courtney-NPL**, and **Brill**, as

presented in the request and claim charts, is required to meet this limitation.

Requester cites **Paek** as disclosing this limitation at *col. 17:26-61 and figure 8*. For

the reader's convenience **Paek's** *figure 8* is reproduced below.

FIG. 8

Requester cites **Qian** as teaching this limitation at *col. 2:55 to col. 3:8 and figure 1*.

For the reader's convenience, *figure 1* of **Qian** is reproduced below.

Requester cites **Courtney-NPL** _pg. 618, cols. 1-2_ as teaching this limitation. For the reader's convenience, _figure 16_ of **Courtney-NPL** is reproduced below.
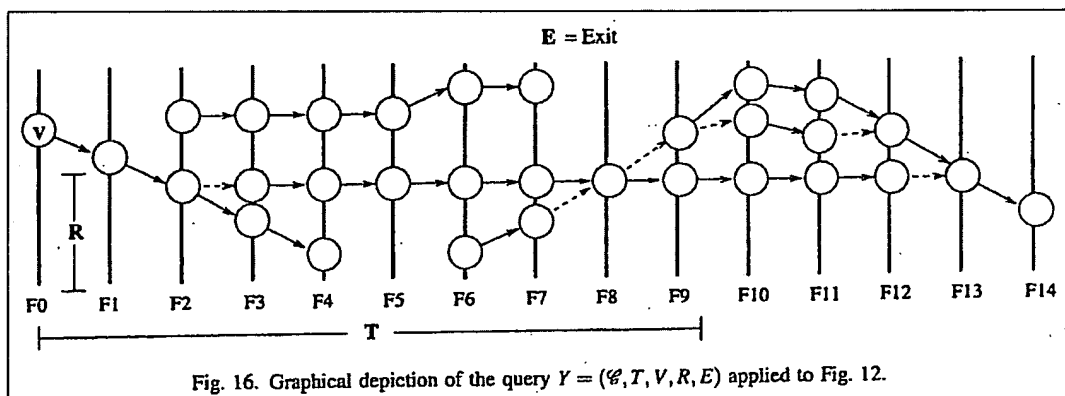

Fig. 16. Graphical depiction of the query $Y = (\mathscr{C}, T, V, R, E)$ applied to Fig. 12.

Requester cites **Brill** _col.4:27-36, col.4:61 to col.5:28, fig. 3, col.6:8-30, col.7:45-54, col.8:36-58, and figure 3_ as teaching this limitation. For the reader's convenience, _figure 3_ of **Brill** is reproduced below.
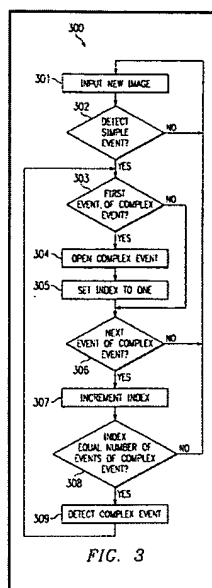
FIG. 3

First, **Paek**'s *event and object hierarchy extraction and construction #830* identifies the

event by the detected attributes *of object extraction and feature extraction #826*.

Consequently, **Paek** does not disclose the claimed 'identifying an event that is <u>not</u> one

of the detected attributes'.

Second, **Qian** discloses *detected events #22* that are a result of *texture/color analysis*

#10, *motion estimation #8*, and *shot detection #6*. As such, **Qian** does not suggest the

claimed 'identifying an event that is <u>not</u> one of the detected attributes'.

Third, **Courtney-NPL**'s query Y=(6, T, V, R, E), where 6 is the video clip, T

specifies a time interval in the clip, V is a V-object within the clip, R a spatial region in

the field of view, and E an object-motion event. (*pg. 618, col.1, 3rd ¶*) The query engine

processes Y by finding all the video subsequences in 6 that satisfy T, V, R, and E. (*pg.*

618, col.1, 2nd ¶) As such, **Courtney-NPL** does not disclose or suggest identifying an

event, such as the disclosed 'find any occurrence of this object being removed from this

region of the scene between 8am and 9am' that is not one of the detected attributes, as claimed, because the event is determined as a function of T, V, R, and E.

Fourth, **Brill** discloses detecting a series *of simple events #302*, such as REMOVE and EXIT, to detect a *complex event #309*, such as THEFT. (*see fig. 3 and col. 4:30-35*) As such, Brill discloses the complex event is detected as a function of detected simple events REMOVE and EXIT. Therefore, **Brill** does not disclose or suggest identifying an event that is not one of the detected attributes, as claimed.

For the reasons set forth above, the combination of **Paek**, **Qian**, **Courtney-NPL**, and **Brill**, as presented in the request and the claim charts, do not disclose or make obvious *"means for identifying an event of the first object interacting with the second object by applying a new selected user rule to the plurality of attributes stored in memory"* in combination with the other features of the claims. Consequently, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection.
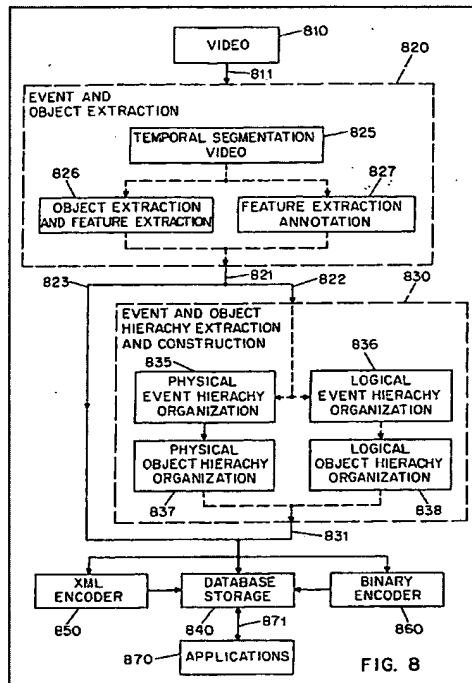
Issue (S)

Requester proposed that <u>**claims 30-41**</u> are obvious over the combination of **Paek**, **Qian**, **Courtney-NPL**, and **Olson**. The request and claim charts allege that **Paek** discloses limitations of <u>**claims 30-41**</u> and **Qian**, **Courtney-NPL**, and **Olson** teaches limitations of <u>**claims 30-41**</u>. (*request pgs. 88-89 and claim charts pgs. 3822-3885*)

As to the limitation of *"detecting first and second objects in a video from a single camera"*, requester cites **Paek** as disclosing this limitation and **Qian**, **Courtney-NPL**, and **Olson** as teaching this limitation. (*claim charts pgs. 3788-3791*) Since requester is

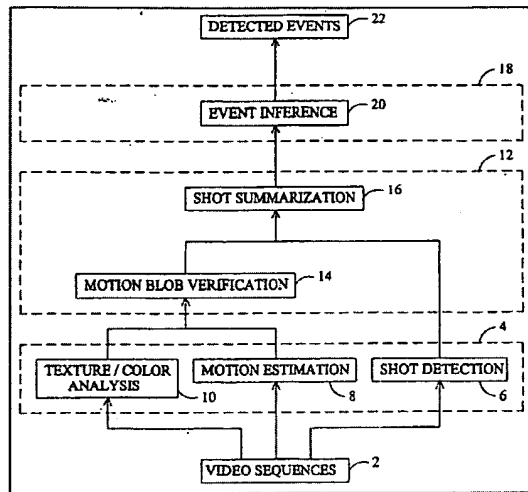citing **Paek**, **Qian, Courtney-NPL**, and **Olson** for this single limitation, the examiner

considers the combination of **Paek**, **Qian, Courtney-NPL**, and **Olson**, as presented in

the request and claim charts, is required to meet the limitation of "*detecting first and*

second objects in a video from a single camera".

 Requester cites **Paek** as disclosing this limitation at *col.17:26-61 and figure 8*. For

the reader's convenience **Paek**'s *figure 8* is reproduced below.

FIG. 8

 Requester cites **Qian** as teaching this limitation at *col.2:55 to col.3:8 and figure 1*.

For the reader's convenience, *figure 1* of **Qian** is reproduced below.

Requester cites **Courtney-NPL** as disclosing this limitation in *pg. 616, col.2, figure 13, pg. 608, col.2, figure 1, pg. 609, cols. 1 and 2, and figure 13*. For the reader's convenience, *figure 13* of **Courtney-NPL** is reproduced below.
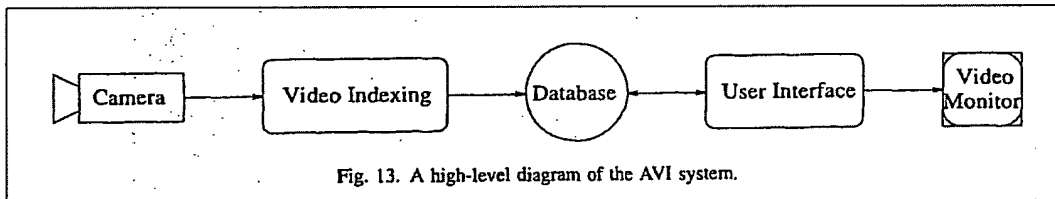

Fig. 13. A high-level diagram of the AVI system.

Requester cites **Olson** as teaching this limitation at *pg. 166, col. 1 and figure 4*.

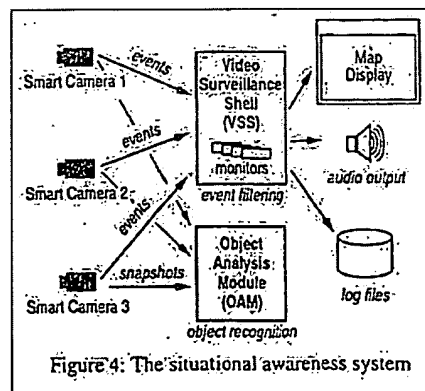For the reader's convenience, *figure 4* of **Olson** is reproduced below.

Figure 4: The situational awareness system

The examiner does <u>not</u> agree that this obviousness rejection has a reasonable likelihood of prevailing because the general application of the combination of **Paek**, **Qian**, **Courtney-NPL**, and **Olson** to <u>**claims 30-41**</u> in the request and claim charts teaches away from the limitation "*means for detecting first and second objects from a single camera*'" because the combination of **Paek, Qian,** and **Courtney-NPL** is ultimately being modified by the <u>multiple</u> smart cameras of **Olson**'s *figure 4* thereby resulting in a system/method for detecting objects in videos from <u>multiple</u> cameras and not the claimed <u>single</u> camera. For at least this reason, requester has <u>not</u> shown a reasonable likelihood of prevailing with respect to this proposed obviousness rejection of <u>**claims 30-41**</u> because the teaching of **Olson**, as presented in the request and claim charts, teaches away from the claimed invention.

Conclusion

All correspondence relating to this *inter partes* reexamination proceeding should

be directed:

By Mail to: Mail Stop *Inter Partes* Reexam
Attn: Central Reexamination Unit
Commissioner for Patents
United States Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

By FAX to: (571) 273-9900
Central Reexamination Unit

By hand: Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Registered users of EFS-Web may alternatively submit such correspondence via

the electronic filing system EFS-Web, at:

https://efs.uspto.gov/efile/myportal/efs-registered

EFS-Web offers the benefit of quick submission to the particular area of the.

Office that needs to act on the correspondence. Also, EFS-Web submissions are "soft

scanned" (i.e., electronically uploaded) directly into the official file for the reexamination

proceeding, which offers parties the opportunity to review the content of their

submissions after the "soft scanning" process is complete.

Extensions of time under 37 CFR 1.136(a) will not be permitted in these

proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and

not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 314(c) requires

that *inter partes* reexamination proceedings "will be conducted with special dispatch"

(37 CFR 1.937). PO extensions of time in *inter partes* reexamination proceedings are provided for in 37 CFR 1.956. Extensions of time are not available for 3PR comments, because a comment period of 30 days from service of PO's response is set by statute. 35 U.S.C. 314(b)(3).

The PO is reminded of the continuing responsibility under 37 CFR 1.985(a) to apprise the Office of any litigation activity, or other concurrent proceeding, involving this patent throughout the course of this reexamination proceeding. The 3PR is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §2686 and 2686.04.

Any inquiry concerning this communication or earlier communications from the examiner, or as to the status of this proceeding, should be directed to the Central Reexamination Unit at telephone number (571) 272-7705.

Signed:

/Deandra M. Hughes/
Primary examiner, AU3992

/Christina Y. Leung/

/Daniel J Ryman/
Supervisory Patent Examiner, Art Unit 3992