IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	Confirmation No. 2862
Robert Eugeniu Mateescu et al.	Examiner: Justin R. Knapp
Application No. 13/649,098	Technology Center/Art Unit: 2112
Filed: 10/10/2012	<u>Petition to Withdraw Restriction</u> <u>Requirement Under 37 C.F.R. § 1.144</u>
For: Encoding and Decoding Data to Accommodate Memory Cells Having Stuck-At Faults	

Commissioner for Patents
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In response to the office actions dated August 28, 2014 and March 12, 2015, a petition is hereby presented to request withdrawal of the restriction requirement set forth in these two office actions under 37 C.F.R. § 1.144 for the reasons set forth below.

I. Statement of Facts

The first office action dated August 28, 2014 subjected the claims of the present application to a restriction requirement between Groups I and II. Group I includes claims 1-8 and 14-19. Group II includes claims 9-13 and 20-21.

The response to the first office action filed in the USPTO on November 13, 2014 provisionally elected Group I corresponding to claims 1-8 and 14-19 with traverse. The response filed by the applicant November 13, 2014 also requested reconsideration and withdrawal of the restriction requirement. Claims 9-13 and 20-21 were withdrawn from consideration.

The March 12, 2015 final office action maintained the restriction requirement between claim Groups I and II.

II. Points To Be Reviewed

This petition is being presented to request withdrawal of the restriction requirement between claim Groups I and II in the present application.

III.   Arguments Against Restriction Requirement

The August 28, 2014 office action restricted claim Groups I and II based on MPEP 806.05(d). MPEP 806.05(d) states:

> Two or more claimed subcombinations, disclosed as usable together in a single combination, and which can be shown to be separately usable, are usually restrictable when the subcombinations *do not overlap in scope* and are not obvious variants. (Emphasis added)

MPEP 806.05(j) states that "the inventions as claimed do not overlap in scope, i.e., are mutually exclusive." Thus, the words "do not overlap in scope" in MPEP 806.05(d) refer to the alleged subcombinations being "mutually exclusive" as defined in MPEP 806.05(j).

MPEP 806.05(j) states that "[t]he burden is on the examiner to provide an example to support the determination that the inventions are distinct." The office action did not provide an example to support the restriction requirement. The examiner's note in the MPEP under paragraph 8.14.01 states that "the inventions as claimed are mutually exclusive, i.e., there is no product (or process) that would infringe both of the identified inventions."

The present application discloses that the claims in Group I (claims 1-8 and 14-19) and the claims in Group II (claims 9-13 and 20-21) overlap in scope, because both Groups I and II cover data storage system 100. Data storage system 100 is disclosed in the present application with respect to Figure 1. Data storage system 100 includes a control circuit 101 as shown in Figure 1.

Figures 1, 2, and 3 and their related descriptions in the present application disclose embodiments of the claims in Group I. As an example, the operations of Figure 2 are an embodiment of independent claim 14 in Group I. The present application discloses that control circuit 101 of Figure 1 can perform the operations of Figures 2 and 3. Paragraph [0019] of the present application states that the "operations of Figure 2 may, for example, be performed by an encoder in control circuit 101." Operations 201-204 of Figure 2 are described in paragraphs [0020]-[0021] as being performed by the encoder in the control circuit. Paragraph [0024] of the present application states that the "operations of Figure 3 may, for example, be performed by control circuit 101."

Figures 1 and 4 and their related descriptions in the present application disclose embodiments of the claims in Group II. As an example, the operations of Figure 4 are an embodiment of independent claim 20 in Group II. The present application discloses that control

circuit 101 of Figure 1 can perform the operations of Figure 4. The present application states in paragraph [0041] that "Figure 4 is a flow chart that illustrates examples of operations for decoding the encoded data bits generated by the operations of Figure 2 and/or Figure 3 to regenerate the data bits using the redundant bits." Paragraph [0041] of the present application states with respect to Figure 4 that the "encoded data bits and the index bits (i.e., the redundant bits) are then provided to a decoder in a control circuit, such as control circuit 101." Operations 401-405 of Figure 4 are described in paragraphs [0042]-[0046] of the present application as being performed by the decoder in the control circuit.

Thus, the claims of Groups I and II both cover the embodiment of data storage system 100 including control circuit 101 shown in Figure 1. Therefore, the claims of Groups I and II overlap in scope and should not have been subjected to a restriction requirement as required by MPEP 806.05(d).

MPEP 806.05(d) further states:

> To support a restriction requirement where applicant separately claims plural subcombinations usable together in a single combination *and claims a combination* that requires the particulars of at least one of said subcombinations, both two-way distinctness and reasons for insisting on restriction are necessary. … For example, if an application claims ABC/B/C wherein *ABC is a combination* claim and B and C are each subcombinations that are properly restrictable from each other, … (Emphasis added)

The claims of Group I relate to encoding data bits to generate encoded data bits and redundant bits. The claims of Group II relate to applying a vector to the encoded data bits to generate data bits. None of the claims 1-21 of the present application is a combination claim that requires both the elements of Group I and the elements of Group II. Therefore, MPEP 806.05(d) does not apply to the claims of the present application.

For all of these reasons, the restriction requirement between claim Groups I and II does not satisfy the requirements of 35 U.S.C. §121 or the MPEP, and should be withdrawn.

IV. Conclusion and Action Requested

For the reasons provided above, it is submitted that the restriction requirement between claim Groups I and II is improper and does not comply with the requirements of the MPEP. It is respectfully requested that the restriction requirement between claim Groups I and II be withdrawn in the present application.

Dated: May 4, 2015   Respectfully submitted,

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