

<design applicants and practitioners>

Karen Young, Director
Technology Center 2900
United States Patent and Trademark Office

<date>

Dear Director Young:

This letter comes to you from <number of> design applicants and practitioners. The signers, personally or through their firms or corporations, have between them prosecuted more than <number> United States design patents to issuance. The signers, personally or through their firms or corporations, have between them paid more than <number of dollars> in fees to the United States Patent and Trademark Office design patents in the past ten years. We ask for several improvements in ways that the USPTO handles drawings in design patent prosecution and examination.

To describe a first concern, it will be helpful to recall an aspect of the way that the USPTO e-filing systems (EFS-Web and Patentcenter) handle PDF documents which are uploaded into USPTO's IFW system. It is but a slight overstatement to say that the USPTO e-filing systems ruin any file that get loaded into IFW if the file contains any amount of color or gray scale. The source of the problem is that the designers of IFW apparently chose to limit its permitted image types to a color depth of 2, that is, image types in which each pixel is either pure black or pure white. The designers of the e-filing systems then needed to choose what to do in the event that the person doing the e-filing (who might be inside or outside the USPTO) happened to upload a PDF file in which some pixels were of a color other than pure white or pure black. The designers chose to do "halftoning", which is a process that spreads the information content of any particular pixel that is not pure white or pure black over a group of pixels, so that the pixels in the group are each either pure black or white and so that the group, taken together, has a blended gray tone that approximates the gray tone of the single original gray-scale pixel. There are some real-life situations such as lithographic printing of newspapers for which halftoning is helpful. But in USPTO's IFW system, from an applicant's perspective, halftoning rarely if ever provides any benefit to the applicant and usually serves only to introduce substantial blurring into what might previously have been a readable or viewable image.

The way that the USPTO e-filing systems (EFS-Web and Patentcenter) handle PDF files containing color or gray scale differs depending upon the document description ("indexing") selected by the filer at the time of filing. If the filer indexes the document as a "non-black-and-white drawing", for example, then the USPTO e-filing systems half-tone the drawings and place the blurred result into IFW, but the USPTO e-filing systems also place the clearly viewable original drawings into the SCORE (supplemental content) system. If, on the other hand, the filer indexes the document as, say, an Office Action or as a Response to an Office Action, then the USPTO e-filing systems half-tone the PDF document and place the blurred result into IFW, with no further step taken to preserve the clearly viewable original document.

It is also helpful to recall that from a user-interface point of view (from the point of view of a USPTO customer or from the point of view of a USPTO Examiner) it is very easy for a user to find any particular file of interest in IFW, for example scanning by date or by document description, and it is easy to sort by any of several columns including date and document description. It is easy to download two or more files at once, as individual files or as a collective single PDF file. Any user, whether

experienced with USPTO systems or relatively new to the systems, can readily figure out how to carry out such tasks, and can readily view or download or print such files.

In contrast, some users inside the USPTO as well as outside the USPTO are not as familiar with the SCORE system. Even those users who are very familiar with the SCORE system find that it not nearly so easy to search for or find any particular file of interest. A user who knows that some particular set of images of interest must be somewhere in SCORE will sometimes find that the only way to actually locate the desired set of images will be to download every set of images in SCORE and then view every set of downloaded images, one by one, to eventually work out which set of images happens to contain the particular images that are of interest. The text labels for files in SCORE are sometimes unhelpful and it is not possible to sort things by date or description. A consequence of all of this is that stated colloquially, the number of mouse clicks needed to find some particular file of interest in SCORE is often five times greater than the number of mouse clicks needed to carry out a hunt for a particular file of interest in IFW. A further disincentive to make use of drawings from SCORE, as compared with the use of drawings from IFW, is that the file size of a drawing from SCORE might be ten times or fifty times bigger than the file size of a drawing in IFW, meaning that the number of seconds or minutes that one must wait for the file to download might be ten times or fifty times greater.

All of these things make it very understandable if an Examiner, carrying out an examination of a design patent application, might have a strong habit of carrying out the examination, at least in the first instance, based solely upon the drawings as they appear in IFW.

With this background in mind, this letter now describes what sometimes happens when an Examiner in a design patent case writes an Office Action saying that a figure or a portion of a figure is unclear or indistinct or fuzzy. What sometimes happens is that an Examiner, who understandably wants to be helpful in pointing out where the problem lies, will take screen shots from his or her computer screen, will crop the screen shots, and will paste the cropped screen shots into his or her Office Action. The Examiner may then add colored arrows or oval markings to denote particular points of interest in the screen shots. The Examiner will then use words to explain the examples of what is said to be unacceptably unclear or indistinct or fuzzy.

The challenge for the applicant or practitioner is that sometimes the Examiner will fail to say whether the images being complained about were drawn from IFW or were drawn from SCORE. Given that many drawings in IFW are fuzzy *precisely because* the USPTO system ruins them and makes them fuzzy, it is not at all a surprise if an Examiner might say that something from IFW is fuzzy. Some of the undersigned have had past instances where the next step was to ask the Examiner to please look for the first time at the SCORE drawings, and then the problem went away because the Examiner said the SCORE drawings lacked the defects complained of in the Office Action.

This brings this letter to a first request. It is requested that Examiners in Technology Center 2900 be required, when objecting to the quality of a figure, to clarify in the Office Action whether the figure being objected to is a figure that the Examiner drew from IFW or is a figure that the Examiner drew from SCORE. Such clarification, provided in the Office Action, will save time and trouble for both the applicant or practitioner on the one hand, and for the Examiner on the other hand. Another way to describe a benefit of such clarity in an Office Action is that it will avoid piecemeal prosecution that might otherwise result.

This letter now turns to a second request. It has become common in recent years for an Examiner to use image rendering software to blow up a figure by 200% or even 400% on the computer screen of the

Examiner. Once the figure has been blown up to this expanded view, it has become common for an Examiner to object to a figure because of some fine detail that can only be seen in the blown-up rendering of the figure but that would never actually be visible in the printed patent. It is suggested that except in relatively rare circumstances, such objections to figures based upon what can be seen only when an image is magnified greatly should not be imposed.

A colloquial way to say this is that just because one's computer screen and one's image rendering software make it is *possible* to blow up an image by 200% or by 400%, does not mean that it *actually promotes science and the useful arts* to do so.

It is respectfully suggested that when members of the public face the task of working out the scope of a claim in a design patent, their source document is the actual issued design patent (and, of course, the high quality image-based PDF of the issued design patent in SCORE that the USPTO provides for some issued design patents). The metes and bounds of the claim are not determined by blowing up a vector-based image file from some intermediate stage of the application process, but are determined by viewing of the patent that actually got issued by the USPTO.

Some of the undersigned have some nostalgia for the old days of hand-drawn India-ink drawings on Bristol board, and it would be understandable if some among the Examining Corps in Technology Center 2900 were to have such a nostalgia as well. But it would be unfortunate if such a nostalgia were to lead to an unwillingness to permit the use of otherwise clear vector-based drawings from which the scope of a claim could be clearly understood. This letter respectfully requests that the blowing-up of vector-based figures to high magnification be carried out during examination only to the extent that it reasonably relates to what would actually make a difference in the actual issued patent at the scale at which the figure would appear in the issued patent.

This letter now turns to a third request. The third request relates to the above-mentioned aspect of the USPTO's e-filing systems in which any PDF file that contains images that have color or gray scale will get blurred when the file gets processed for loading into IFW.

It will be recalled that many Examiners, in an understandable effort to be helpful when trying explain what is being objected to in a figure, will capture a screen shot, will crop it, and might use an arrow or oval to point to a place of interest in the cropped screen shot. The Examiner will then insert the edited image into the Office Action. The edited image invariably contains gray scale and often contains color. The Office Action then gets uploaded into IFW. A first result, unfortunately, is that any color in the image gets flattened to gray scale. A second result, even more unfortunate, is that the gray scale in the image gets half-toned, and as a result the image gets blurred, sometimes almost to a point of unreadability.

The blurring that happens in the USPTO systems when an Examiner's Office Action gets loaded into IFW is particularly unhelpful in the particular case where the Examiner is trying to help the applicant understand *what is thought to be unacceptably blurry about the applicant's own figures*. It is sometimes very difficult for the applicant or the practitioner to discern, from the blurred version of the Office Action that is available in IFW, whether the real or imagined blurriness is an artifact of what happened when the Office Action got uploaded into IFW, or is an actual blurriness in the original figure.

Saying this colloquially, the same USPTO systems that ruin images e-filed by USPTO customers when they contain any gray scale or color, also ruin images e-filed by USPTO employees when they contain

any gray scale or color. This means the applicant or practitioner does not actually get to see the image the same way it looked when the Examiner pasted it into the Office Action.

This letter asks that as for any Office Action containing any gray scale or color, the Examiner be directed to upload the Office Action into SCORE, not into IFW. The Examiner should then be directed to insert an appropriate single-page sheet in IFW telling the reader that the actual Office Action is in SCORE.

This letter now turns to a fourth request. It is requested that Examiners in Tech Center 2900 be directed henceforth to state in each Notice of Allowance that the Issue Branch should always use the SCORE images when printing the issued patent. Unfortunately at present, Examiners differ from one to the next as to whether they give such instructions to the Issue Branch. An alternative way to address this concern would be for the USPTO to revise the MPEP to contain an express direction to the Issue Branch to do so.

We thank the Director for consideration of these requests. We suggest that if these suggestions are followed, the result will be improved examination quality for design applications, more compact examination thereof, and higher quality of issued design patents.

Respectfully submitted,