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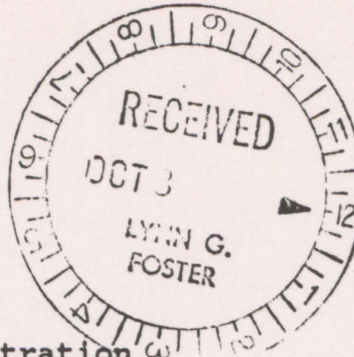
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October 6, 1987

M277-100.1

Mr. Lynn G. Foster
Attorney at Law
602 East Third South
Salt Lake City, Utah 84102



Re: Hall v. Megadiamond Arbitration

Dear Mr. Foster:

As Tracy Hall may have told you, Megadiamond has made an offer to settle the controversy that underlies this arbitration. We think we have an excellent position in this matter, but would like to settle it rather than engender any further ill will. Settling promptly is desirable to minimize costs for all concerned.

We understand that it is Tracy's theory that the original intent of the parties was that a royalty would be paid on all polycrystalline diamond (PCD) products made by Megadiamond. That is inconsistent with the actual terms of the Patent Sales Agreement. If there was any such understanding before the Agreement, it would be negated by Paragraph 12 which integrates any prior understandings into this Agreement.

Further, parol evidence would be inappropriate to vary or contradict the written words, since the Agreement is free of doubt, ambiguity, or uncertainty. A royalty is payable when the "Inventions" are used by Megadiamond. The Agreement states that the Inventions are "listed below", and the only items listed are the two pending applications and their foreign counterparts.

Thus, it seems to us that the only issue in this matter is whether the products presently made by Megadiamond employ the subject matter of either of the two applications. There is no hint in the Agreement that it should encompass all PCD products.

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At the risk of mentioning matters you already know, I would like to outline some of the technology involved. When diamonds are synthesized from carbon at high temperatures and pressures with short cycle times, the product is a multitude of small diamond crystals. A large number of such crystals are sintered or welded together to form a structural body of PCD of predetermined shape. It is such sintered diamond that is the subject of this arbitration.

The sintered diamond where adjacent diamond crystals are connected together by diamond-to-diamond bonds should be distinguished from "cemented" material where individual diamond crystals are merely cemented together by a matrix of a bonding agent such as an iron group metal. Such cemented diamond was the first attempt to produce structural bodies of synthetic diamond.

I am enclosing a copy of De Lai Patent No. 3,141,746, assigned to General Electric. This patent describes a technique for making PCD using metal as a catalyst. Among the metals disclosed is cobalt. The text clearly distinguishes the PCD product from the prior cemented diamond products, although the term "polycrystalline diamond" had apparently not been invented yet.

The first of the inventions listed in the Patent Sales Agreement matured into U.S. Patent No. 3,829,544. This technique sinters diamond crystals together without the use of a catalyst metal. Diamonds alone are pressed at high temperature to form PCD.

The second of the inventions conveyed in the Agreement never matured into a patent, having been rejected on the basis of prior art that fully anticipated much of the claimed subject matter. This application concerned sintering diamonds along with an "abrasive" material having a specified hardness. Several metal carbides and silicon are examples. It appears that the silicon forms abrasive silicon carbide under these conditions. The patent application itself distinguishes the subject matter from the prior De Lai patent which has a softer metal catalyst.

One thing in common to all three of these is the sintering of the diamond in a pressure and temperature regime where diamond is thermodynamically stable. There is at least one other patent which is not in issue where diamond is sintered rapidly under pressure and temperature conditions where diamond is unstable.

Megadiamond does not make any PCD products by sintering diamond-to-diamond without a catalyst metal. All of the products which

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could possibly be in issue employ a mixture of cobalt and diamond much as described in the De Lai patent.

The importance of the cobalt catalyst in the process for sintering diamond is demonstrated by the current techniques for making "thermally stable" PCD which is largely free of metal. Rather than sintering diamond in the absence of cobalt as described in the patent application conveyed under this Agreement, the technique described by De Lai is used. The diamond is sintered with a cobalt catalyst and the metal is then leached out, leaving only the sintered diamond.

Additionally, the current PCD products are all formed on a substrate of cemented tungsten carbide. Cemented tungsten carbide is a product made by mixing tungsten carbide powder and cobalt, pressing to form a compact, and "sintering" the compact at a temperature near the melting point of the cobalt. The tungsten carbide does not "sinter" in the sense that diamonds sinter in the formation of PCD, but instead the carbide particles are cemented together by the metal phase. The cobalt in the cemented tungsten carbide appears to provide a reservoir or sink for cobalt and enhances the quality of the PCD. This technique is described in Wentorf Patent No. 3,745,623, assigned to General Electric. It was some years after issuance of this patent that Megadiamond adopted this technique. A couple of years ago GE approached Megadiamond with respect to this and another patent, and Megadiamond agreed to a license, paying GE \$500,000 and a royalty.

The Wentorf patent also describes a product where a transition layer is provided between a cemented tungsten carbide substrate and a layer of PCD. The transition layer contains tungsten carbide, cobalt, and diamond grit in a graded mixture to minimize stress concentrations due to the differing properties of the carbide substrate and PCD. Megadiamond also adopted such a transition layer between cobalt catalyzed PCD and a cemented tungsten carbide substrate, with an added feature. According to Megadiamond's technique, cemented tungsten carbide is made in the usual manner, crushed and screened. Particles of the precemented tungsten carbide, cobalt powder and diamond powder are mixed to form the transition layer. Cobalt is always present for catalyzing the sintering of the diamond particles.

The point of mentioning some of this is that we do not believe any of the technology currently used could be considered as "improvements" under this Agreement. The processes used are all based on the earlier De Lai patent or the Wentorf patent, both of which are from General Electric, rather than Tracy Hall. Even though it is later, the techniques described in the Wentorf patent cannot be considered an improvement to the subject matter

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in the Hall applications, since the PCD portion of the compact on the carbide substrate is cobalt catalyzed as in De Lai.

In summary, we feel we have an excellent position that none of the products presently made by Megadiamond are subject to royalty payments.

Megadiamond has made royalty payments on the cobalt catalyzed products, as well as some earlier products that were made in accordance with the second of the Hall applications, using silicon in the PCD. Tracy seems to think that this precludes us from claiming that such products are not within the scope of the inventions conveyed. The lack of any estoppel on an assignee to deny infringement long antedates the Lear v. Adkins case. I refer you to Westinghouse v. Formica, 266 US 342 (1924).

I think there is an additional problem if Tracy takes the position that at the time of the Agreement, it was contemplated that royalties would be paid on the cobalt catalyzed material. This was certainly a right Tracy could not convey because of the earlier De Lai patent. He was well aware of this patent since he had described it in the background of his previously filed patent application. (Tracy wrote the draft application himself.) Any representation to Megadiamond that he could convey such rights would be a misrepresentation that would affect the underlying validity of the entire Agreement.

As you may know, Megadiamond has made a counterclaim in the arbitration. In 1979 Megadiamond commenced paying Tracy "advance royalties" of \$1500 per month. We have not found any documentation in support of these payments. We can only conclude that they were advance royalties under the Patent Sales Agreement, which were at that time unearned. We continue to believe that these are unearned and seek a refund. The total amount paid was \$144,000.

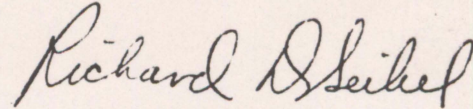
In addition, consistent with our belief that the cobalt catalyzed materials are not within the scope of the rights conveyed, we believe Tracy should account for, and refund, royalties erroneously paid on cobalt catalyzed material. I am not sure yet whether we can support this part of our counterclaim, but I see no problem with the refund of unearned advance royalties.

I think it is foregone that each side in a dispute will view the matter from a different perspective and evaluation of the likelihood of success. There are few disputes where either side has a one hundred percent chance of such success. I therefore think it is desirable that the parties seriously consider a settlement, taking into account the economics of the situation and the strengths and weaknesses of their position.

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On my wall I have a slip I retrieved from a 'Chinese fortune cookie many years ago. It says "A lean compromise is better than a fat lawsuit". I subscribe to that philosophy and suggest that you evaluate this matter with the desirability of settlement in mind.

Very truly yours,

A handwritten signature in cursive script that reads "Richard D. Seibel". The signature is written in dark ink and is positioned above the typed name.

Richard D. Seibel

Enc.

cc: Sii Megadiamond, Inc.